THE MORPHOLOGY OF THE ARABIC DIALECT OF TUNIS

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ABSTRACT

The thesis is an analysis of the morphology of the Arabic dialect Tunis. Chapter one presents the relevant aspects of phonology, an chapter two is an informal outline of the main morphological patte Chapters three to five discuss in detail the morphology of the ver (including participles), the noun and the adjective respectively. Chapter six discusses clitics, with special reference to enclitic pronouns. The particular contributions to previous work are as follows: (a) the data on the dialect of Tunis are set out systematically and in detail for the first time,

(b) generalisations missed in previous work on Arabic h been allowed by certain untraditional analyses, such as taking the imperative as the underlying form of the verb, and also by the formulation of certain phonological and morphological rules,

(c) a quantitative analysis of the morphological patte based on a dictionary corpus, highlights the amount of irregulari in the system,

(d) this analysis also allows more peripheral patterns be distinguished from the central ones,

(e) the analysis is formalised in terms of the theory 'word grammar', and constitutes the first application of this the to a language other than English.

ACKNOWLEDGEMENTS

Dr. R.A. Hudson of University College, London, has given most freely, time and consideration in the course of my research for and writing of this thesis, while Samia Allegue, my sister, has provided both financial and moral support for the project. To both I tender my sincere thanks.

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FOREWORD

The thesis is an analysis of the morphology of the Arabic dialect of Tunis, Tunisia. The dialect in question belongs to what is commonly referred to as 'Colloquial Arabic'. Furthermore, is is regarded as the 'prestige dialect' of the country (Ferguson, 1970). For the analysis, I shall use two kinds of sources: firstly, my own intuitions as a native speaker; secondly, a list of words taken from a French-Arabic glossary, L'Arabe Fonctionnel (1976).

Little has been published on Tunisian Arabic in general, and the morphology of Tunisian Arabic in particular. The following is a list of books and articles that have been available: T. Baccouche (1969), H. Skik (1969), A. Attia (1969), C.E.R.E.S. (1964-79), D. Cohen (1970 and 1975), Commission Permanente de l'Arabe Fonctionnel (1976), S. Garmadi (1966 and 1967), P. Marcais and M.S. Hamrouni (1977), P. Marcais (1977), A. Mhiri (1973-4), H. Skik and M.H. Ounali (1971), F. Talmoudi (1979), H. Wise (1979), Y.N. Zawadowski (1978).

I have not been able to consult the following as they have not been available: J. Cantineau (1951), M. Maamouri (1967) and M.H. Saāda (1967).

I have not been able to consult H. Stumme (1896) either because there has been no translation available.

Finally, I have had access to books, theses and articles about other dialects of Arabic. These include: H.M. Abel-Fetouh (1969), M.H. Bakalla (1973 and 1975), A. Benhallam (1979), M.K. Brame (1971 and 1974), J. Cantineau (1960), S.E. Fox (1979), J. Grand'Henry (1972),

F. Abu Haidar (1970), B. Ingham (1974), R. Jackobson (1957), A.S. Kaye (1970), W. Marcais (1908), T.F. Mitchell (1978), J. Moore (1979), Zaki. N. Abdel-Malek (1972).

I have not managed to consult T. Baccouche (1973).

The main contribution to previous work is in the application to Tunisian Arabic morphology of modern linguistic principles including the formal framework of Hudson's theory of 'word grammar'. Because of this orientation to theoretical linguistics, generalisations missed in previous work have been captured, and rules have been formalised in terms of the theory of 'word grammar'. I also hope to have been able to add some other points to previous work. In some respects, for example, the analysis conflicts with the traditional description of Arabic grammar. The analysis has also excluded dead derivational morphology from the rules. Some new facts about the dialect have been added. Finally, the analysis has been based on statistics. This was made possible by the closed list of words provided by the glossary.

CHAPTER I : RELEVANT ASPECTS OF PHONOLOGY

I. PHONEMES

A. Consonant phonemes

The dialect has the following consonant phonemes:

	Bi-labial	Labio-dental	Inter-dental	Dental/ Alveolar	Palatal	Velar	Uvular	Phar-yngal	Laryn-gal
Stops:									
voiced	b			d		g			
voice-less	(p)			t ṭ		k	q		(ʔ)
Frica-tives:									
voiced		(v)	ð ḍ	z	ʒ		ɣ	ʕ	
voice-less		f	θ	s ṣ	ʃ		x	ħ	h
Nasals	m			n					
Liqu-ids:									
later-al				l					
trill				r					
Semi-vowels	w				y				

The above classification is based on the one in Talmoudi (1979) with a few changes.

Remarks

(a) The glottal stop (Hamza)

This is found only in some Classical Arabic loan words. I am only aware of two examples:

s?il 'he asked'

?ay:as 'he resigned himself'

(b) /p/ phoneme

This is also marginal. Loan words usually contain /b/ in place of an original /p/.

Examples: bo:la 'spade' (from French 'pelle')

bobu:r 'ship' (from French 'vapeur')

More and more often however, the /p/ in loan words is pronounced [p] in the dialect.

Example: pi:pa 'pipe' (from French 'pipe')

(c) /v/ phoneme

The /v/ in loan words is generally pronounced either [f] or [b].

Examples: fagu:na 'wagon' (from French 'wagon')

bobu:r 'ship' (from French 'vapeur')

As in the case of /p/, the /v/ in loan words is more and more often pronounced [v].

Examples: talvza 'television'(from French 'télévision')

vi:sta 'jacket' (from French 'veste')

(d) /g/ phoneme

This only occurs in a few native words in Tunis (although the Bedouin dialects and those of certain parts of the country regularly have [g] in place of [q]), but it is common in loan words.

Examples: bagra 'cow'

gamra 'moon'

gora:ʒ 'garage' (from French 'garage')

gorsu:n 'waiter' (from French 'garçon')

(e) A dot under a consonant means that the consonant is velarized (ie.'emphatic'). See below

B. Vowel phonemes

The dialect has four short vowel phonemes and four long vowel phonemes:

/a/ as in ʃra 'he bought'

/ɑ/ as in wrɑq 'leaves'

/i/ as in ktib 'he wrote'

/u/ as in mur: 'bitter'

/a:/ as in wa:fiq 'he agreed'

/ɑ:/ as in byɑ:ḍ 'he became white'

/i:/ as in bi:ʕ 'sell!' (imperative)

/u:/ as in ku:l 'eat!' (imperative)

C. Emphatic phonemes

Emphatic phonemes in Arabic raise an interesting problem. Views on the matter vary widely. To some, including Jackobson (1957), D. Cohen (1975) and C.E.R.E.S. (1969), almost every consonant phoneme has its 'pharyngealized' or 'velarized' counterpart.

Examples: b ≠ ḅ

m ≠ ṃ, etc.

But, is pharyngealization, a phonetic feature, also necessarily a distinctive feature?

Others maintain that the emphatic feature is not phonological. Talmoudi (1979), for example, recognizes the existence of three emphatic consonant phonemes: /ṣ/, /ṭ/ and /ḍ/ and insists that the examples showing the distinctiveness of the emphatic feature in the rest of the consonants are too rare to be taken into consideration.

Others still, including Maamouri (1967)[1], Abu Haidar (1970) and

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1. This information was received during correspondence with Dr. Maamouri.

Ingham (1974), maintain that emphasis belongs to the syllable or the word.

I propose to tackle the problem from a different angle. Let us assume first, with Talmoudi, that the emphatic consonants /s̤/, /t̤/ and /ð̤/ are distinct from /s/, /t/ and /ð/ respectively, and that no other phoneme pairs are distinguished only by emphasis. The former assumption is made on the basis of such minimal or near minimal pairs as the following:

s̤ol:a	'he knelt to pray'	-	sal:a	'he cheered (someone) up'
ʕo:s̤i	'bull'	-	ka:si	'my glass'
s̤i:d	'lion'	-	si:d	'master'
s̤u:m	'fast!'	-	su:m	'bargain, ask the price'
s̤o:m	'he fasted'	-	sa:m	'he bargained, asked the price'
ð̤arb	'hitting'	-	ðabħ	'slaughter'
yð̤i:ʕ	'he gets lost'	-	yði:ʕ	'he broadcasts'
ð̤o:q	'it became narrow'	-	ða:q	'he tasted'
fo:t̤ir	'opposite of 'fasting'	-	fa:tir	'tepid'
t̤o:b	'ready' (of food)	-	ta:b	'he repented'
t̤u:f	'wander!'	-	tu:b	'repent!'

The list given above, combined with the one below also shows that /s̤/, /t̤/ and /ð̤/ occur with /o(:)/, /u(:)/ and /i(:)/:

s̤ub:	'pour!'
mo:ð̤i	'sharp'
bo:ð̤u	'they laid eggs'
bo:ð̤u:lna	'they laid eggs for us'
t̤ord	'sack'
qt̤un	'cotton wool'
t̤i:r	'fly!'

In contrast, the rest of the so-called emphatic consonants occur only with the /ɑ(:)/ vowel.

Examples: lbɑ:bɑ 'to my father' - lba:ba 'doughy part of bread

bɑ:ʃ 'canvas' - ba:ʃ 'in order to', or mark of future

ʒrɑ 'it happened' - ʒra 'he ran'

Consequently, the differenciating feature must lie in the vowel (hence my classification of the vowel phonemes above).

Every consonant phoneme, then, (except /s/, /t/ and /ð/, whose emphatic counterparts are distinct phonemes) has an emphatic allophone in the environment of /ɑ(:)/.

Examples: /mɑss/ 'he sucked' [mɑss]

/lɑ:mbɑ/ 'electric lamp' [lɑ:mbɑ]

The Arabic writing system seems to agree with this analysis since it has separate letters for /ṣ/, /ṭ/ and /ḍ/, but not for any other so-called emphatic consonants (ظ, ط, and ض).

P. Marcais (1977, page 5) was aware of the difference between /ṣ/, /ṭ/ and /ḍ/ and the other so-called emphatic consonants:

> On observe que l'emphase, mode d'articulation originale, propre à l'Arabe, comportant un effort musculaire localisé vers les régions postérieures de la cavité buccale (racine de la langue, pharynx), caractérise des sons d'une façon constante: ṭ, ḍ, s, mais peut atteindre aussi des sons d'une façon occasionnelle. On dit alors que ces derniers ne sont pas emphatiques, mais emphatisés.

To summarise this discussion of emphatic phonemes, there are:

- three emphatic consonant phonemes: /ṣ/, /ṭ/ and /ḍ/.
- one back open vowel phoneme: /ɑ(:)/ short and long.
- /ɑ(:)/ occurs freely with non-emphatic as well as emphatic consonant phonemes. All non-emphatic consonant phonemes have emphatic allophones next to /ɑ(:)/, except /t/, /s/ and /ð/ which

remain phonetically non-emphatic.

Examples: kərtɑ:ba 'school-bag'

xsɑ:rɑ 'loss'

ðɑr:ɑ 'atom'

- /a/ does not occur next to /s̤/, /t̤/ and /ð̤/.
- /a/ and an emphatic consonant phoneme, can belong to the same word, provided that they are not adjacent.

Examples: sba:ħ 'morning'

tya:ħ 'falling'

ðba:b 'mist'

II. SYLLABLE STRUCTURE

Two types of syllables can be distinguished (D. Cohen, 1975):

1. 'Open' syllables
2. 'Closed' syllables

'Closed' syllables can further be divided into 'simply closed' syllables and 'doubly closed' syllables.

1. 'Open' syllables'

V	/a-mi:r/	'prince'
CV	xom-sa	'five'
CCV	mrɑ	'woman'
V:	a:-xir	'other'
CV:	qɑ:-ri	'reading' (participle)
CCV:	kti:-ba	'writing'
C:V:	b:ɑ:-bir	'ships'

2. 'Closed'syllables

(a) 'Simply closed' syllables

VC	ik-tib	'write'
CVC	kər-kər	'drag'
CCVC	xrɑʒ	'he went out'

C:VC	m:ɑs-sɑx	'dirty'
CCCVC	tʒroħ	'he was wounded'
CCCCVC	ytʒroħ	'he gets wounded'

(b) 'Doubly closed' syllables

VCC	uxt	'sister'
CVCC	xubz	'bread'
CVC:	sɑb:	'he poured'
CVC:C	ma-sɑb:ʃ	'he didn't pour'
CCVCC	ktibt	'I wrote'
CCVCCC	ma-ktibtʃ	'I didn't write'
CCCVCC	tbʕaθt	'I was sent'
CCCVCCC	ma-tbʕaθtʃ	'I wasn't sent'
CCCVC:	stħoq:	'he needed'
CCCVC:C	ma-stħoq:ʃ	'he didn't need'
CCCCVCC	ma-ytʒroħʃ	'he doesn't get wounded'
CCCCVC:C	ma-ystħoq:ʃ	'he doesn't need'
V:C	briki:-a:t	'lighters'
CV:C	ma:t	'he died'
CCV:C	smi:n	'fat'
C:V:C	m:a:s	'knives'
CCV:CC	ma-ħmo:rʃ	'he didn't become red'
CCCV:C	stfa:d	'he benefited'
CCCV:CC	ma-stfa:dʃ	'he didn't benefit'
CCCCV:CC	ma-ystfa:dʃ	'he doesn't benefit'

The patterns listed above, can be summarised by the following formula:

$$C_0^4(:)V(:)C_0^3(:)$$

III. STRESS

Stress is determined by the syllable structure of the word. Hence it is not phonologically distinctive.

1. The stress falls on the ultimate syllable when it is 'doubly closed', that is, if it contains a long vowel or two or more final consonants. (See above).

Examples: [sirwá:l] 'trousers'

[qot:óʕt] 'I tore'

2. Otherwise, on the penultimate if there is one.

Examples: [xámsa] 'five'

[ʒarí:da] 'newspaper'

[stóqbal] 'he welcomed'

[mná:gil] 'watches'

3. Otherwise, on the only syllable.

Examples: [mró] 'woman'

[ktíb] 'he wrote'

[bú] 'father'

Clitic pronouns and affixes are treated by stress rules as part of the word.

Examples: [níktbu] 'we write'

[niktbú:lkum] 'we write to you' (plural)

[niktbu:hú:lkum] 'we write it to you' (plural)

IV. SPECIAL RESTRICTIONS ON PHONEMES

A word can begin with a consonant, a short vowel or a long vowel.

Examples: ro:ʒil 'man'

iktib 'write!'

a:qif 'stand up!'

A. Epenthesis

In a phonemic cluster of three consonants (medially), an epenthetic vowel [ə] is inserted after the first consonant, whenever the consonant following it is either r, l, ħ, ʕ or h (liquid, pharyngal or laryngal).

Examples: nuʃrbu [núʃərbu] 'we drink'

nuðlṭu	[núðᵊltu]	'we make a mistake'
yoḍẖku	[yóḍᵊẖku]	'they laugh'
yuqʕdu	[yúqᵊʕdu]	'they sit'
tidhʃu	[tídᵊhʃu]	'you (plural) faint'

Similarly, in a phonemic cluster of three consonants (initially), [ᵊ] is inserted between the initial consonant prefix and the remaining consonants of the cluster.

Examples:	tʒrɑħ	[tᵊʒrɑ́ħ]	'he was wounded'
	tdfin	[tᵊdfín]	'he was buried'
	mtχub:i	[mᵊtχúb:i]	'hiding'
	lbla:d	[lᵊblá:d]	'the town'

In a phonemic cluster of four consonants (initially), [ᵊ] is inserted between the initial consonant prefix and the remaining consonants of the cluster.

Examples:	ystfa:d	[yᵊstfá:d]	'he benefits'
	yntħor	[yᵊntħór]	'he commits suicide'
	ytdfin	[yᵊtᵊdfín]	'he gets buried'

[ᵊ] is also added before a word beginning either with a geminated consonant followed by a vowel, or with a geminated consonant which is due to assimilation (see below and chapter on clitics under the article).

Examples:	b:o:bir	[ᵊb:ó:bir]	'ships'
	m:oḍmoḍ	[ᵊm:óḍmoḍ]	participle of /moḍmoḍ/, 'rinse (the mouth)'
	lʒira:n	[ᵊʒ:irá:n]	'the neighbours'
	ldyo:r	[ᵊd:yó:r]	'the houses'

In a phonemic cluster of more than two consonants, where the initial consonant prefix is identical to the one immediately following it, the two consonants behave like distinct consonants (ungeminated).

Consequently [ə] is inserted between them.

Examples: ttxob:a [tᵊtxób:a] 'you (singular) hide'

nnthor [nᵊnthór] 'I commit suicide'

Note that in this particular case a different notation from the one usually used for gemination is used: /CC/ instead of /C:/.

Finally, in a phonemic cluster of three consonants (finally), [ə] is inserted between the final consonant and the one immediately preceding it.

Example: ma ktibtʃ [ma ktíbtᵊʃ] 'I haven't written'

B. Assimilation

- /t/ assimilates to the following consonant if it is a dental stop followed by a vowel.

Examples: tṭi:r [ᵊṭ:í:r] 'you (singular) fly'

tdiz:u [ᵊd:íz:u] 'you (plural) push'

ytdifnu [yᵊd:ífnu] 'they are buried'

- /t/ also assimilates to the consonant preceding it, if it is /ṭ/.

Example: mʃoṭṭ ʃaʕri [mʃóṭ: ʃáʕri] 'I combed my hair'

- If the consonant preceding /t/ is /d/, the latter assimilates to the former.

Examples: ʒbidt [ʒbít:] 'you (singular) pulled'

rqodt [rqót:] 'I slept'

- In a phonemic cluster of two consonants (initially), /t/ is pronounced [d] when it is immediately followed by /g/, /ð/, /ḍ/, /z/ or /ʒ/.

Examples: tgad: [dgád:] 'he improved'

tðu:b [dðú:b] 'it melts'

tḍi:ʕu [dḍí:ʕu] 'you (plural) get lost'

tzu:r [dzú:r] 'she visits'

tʒu:ʕu [dʒú:ʕu] 'you (plural) get hungry'

- Similarly, in a phonemic cluster of two consonants (initially), /n/ assimilates to the following consonant if it is a liquid.

Examples:	nlos:aq	[ˀl:ós:aq]	'I stick'
	nlim:	[ˀl:ím:]	'I gather'
	nri:gil	[ˀr:í:gil]	'I fix'
	nra:ni	[ˀr:á:ni]	'I train' (transitive)
But	nrta:ħ	[nˀrtá:ħ]	'I rest'

C. Consonant clusters

Initially, within a word, two, three and four consonant clusters are permitted:

C:-	Examples:	b:a:bir	[ˀb:á:bir]	'ships'
CC-		mʃa		'he went'
CCC-		stfa:d		'he benefited'
CCCC-		ytktib	[yˀtˀktíb]	'it is written'

Medially, two and three consonant clusters are permitted with the possibility of gemination instead of two different consonants:

-C:-	Examples:	bad:al	'change!'
-CC-		tfalsaf	'he philosophised'
-C:C-		tʕaʒ:bit	'she was surprised'
-CCC-		nuxrʒu	'we go out'

Finally, two and three consonant clusters (again with the possibili of gemination) are permitted:

-C:	Examples:	sob:	'he poured'
-CC		kalb	'dog'
-C:C		masob:ʃ [masób:ˀʃ]	'he hasn't poured'
-CCC		ma fhimtʃ [ma fhimtˀʃ]	'you (singular) hav understood'

D. Restrictions on consonant combinations

I am not going to analyse these in detail since this has already been done by Talmoudi (1979).

1. Two consonant clusters

Only a few consonant clusters are not permitted initially. The most general restriction is that geminated consonants can be initia only if it is a case of either a prefix being identical to the consonant immediately following it,

Examples:	m:os:ox	[ʾm:ós:ox]	'dirty'
	t:arʒam	[ʾt:árʒam]	'you (singular) translate'

or certain irregular plural nouns.

Examples:	f:a:m	[ʾf:á:m]	'mouths'
	b:o:bir	[ʾb:ó:bir]	'ships'
	m:a:ʕin	[ʾm:á:ʕin]	'dishes'

b, t, f, m, n, l, r, w, and y can combine with almost every other consonant in either order.

Emphatic consonants cannot combine with their non-emphatic counter-parts, unless, as was shown above, in the the case of /t/, the first element of the cluster is a prefix, in which case assimilation takes place at the phonetic level.

Example:	tti:ħu	[ʾt:i:ħu]	'you (plural) fall'

Similarly, medially and finally, most consonant clusters are permitt and gemination is possible.

2. Three consonant clusters

Initially, only the combination of radical consonants with historica or synchronic affixes is possible.

Examples:	sthoq:	'need, deserve!'
	stfa:d	'benefit!'
	nthor	'commit suicide!'
	xtraʕ	'invent'
	mhta:ʒ	'in need of'
	tʒroħ	'get wounded!'

The /st/ and the infixed /t/ in such clusters are historical affixes. The /t/ prefix in the last example illustrates the normal passive formed by adding /t/. The /m/ in /mɲta:ʒ/ is a participial prefix.

Medially, most three consonant clusters are permitted. Finally, the third consonant of the cluster is the negative particle.

Example: ma xrɑʒtʃ lyu:m 'I haven't been out today'

3. Four consonant clusters

Such combinations are only encountered initially. They are made up of radical consonants and inflectional affixes.

Examples: mstqol: [mˤstqɑ́l:] 'independent'

ytxsal [yˤtˤxsɑ́l] 'it is washable'

E. Restrictions on vowel phonemes

Short vowels can occur initially, medially and finally.

Examples: uxt 'sister'

tʕal:am 'learn!'

bu 'father'

Long vowels occur initially and medially only.

Examples: a:la 'instrument'

kta:b 'book'

/ɑ/ occurs freely with all consonant phonemes. /a/ does not occur either immediately before or immediately after emphatics (s̤, t̤, ẓ) and uvulars (x, ɣ, q). /u/ and /i/ occur freely with all consonant phonemes.

F. Semi-vowels

There are no phonological diphtongs. /w/ and /y/ follow and precede vowel phonemes freely with one or two exceptions:

/yi/	/yiktib/	'he writes'
ya	yaʕab	'he plays'
yo	yoʕṭi	'he gives'
yu	yuxruʒ	'he goes out'
yi:	ħyi:tu	'you lived'
ya:	mya:ti	'my hundred'
yo:	byo:ḍ	'he became white'
yu:	lyu:m	'today'
iy	iybis	'harden!'
ay	ʃay:	'nothing'
oy	boy:o:ḍ	'painter'

uy does not occur.

i:y	swa:ri:ya	'my shirts'
a:y	ʃa:yiħ	'dry'
o:y	no:y	'flute'
u:y	xu:ya	'my brother'
wi	iʃwi	'fry!'
wa	dwa	'medecine'
wo	woqt	'time'
wu	wuṣṭ	'middle'
wi:	ṭwi:l	'tall'
wa:	ṭwa:l	'he became tall'
wo:	swo:gir	'cigarettes'
wu:	wu:h	(exclamation)
iw	diwa:na	'the customs'
aw	awsaʕ	'wider'
ow	ḍow:	'light'
uw	uwriθ	'inherit'

i:w	qhi:wa	diminutive of /qahwa/ 'coffee'
a:w	ħa:wil	'try!'
ạ:w	tạ:wla	'table'

u:w occurs only phonetically, as an epenthetic element.

Example: ħlu:a [ħlu:^{w}a] 'sweet' (feminine)

Classical Arabic diphtongs are usually long vowels in the dialect. Thus Classical /lawn/ 'colour' is /lu:n/

/zayt/ 'oil' is /zi:t/.

For morphological reasons (which will be made clear in the morphological section), [i:] is sometimes phonemically /iy/. Thus [í:bis] 'harden!' is /iybis/. The phonemic transcription allows me to analyse /iybis/ in a similar way to /iktib/ 'write! ' (singular), which simplifies the morphology. Similarly [u:] is sometimes phonemically /uw/. Thus [ú:sḷu] 'arrive!' (plural) is /uwsḷu/. /uwsḷu/ is thus analysed in the same way as /uxrʒu/ 'go out!'.

V. GENERAL PHONOLOGICAL RULES

The two following rules are very general and apply whenever a stem is in contact with a suffix.

Rule (1) or the rule for final vowel deletion and metathesis

If a vowel-initial suffix is added after a (C)VC sequence, where the first consonant is optional, the vowel in (C)VC is deleted if the stem contains more than one vowel; it is however metathesized if the stem contains one vowel only.

Examples:	niktib	'I write'	niktb u	'we write'
	farkas	'he searched'	farks it	'she searched'
	ktib	'he wrote'	kitb it	'she wrote'
	ktub	'books'	kutb ik	'your (sing.) books'

Rule (2) or the rule for vowel-lengthening

If a stem ends in a vowel, it is lengthened before a suffix. (We shall see however that there are exceptions to this rule).

Examples:	kursi	'chair'	kursi: na	'our chair'
	mʃa	'he went, walked'	mʃa: u	'they went, walked'
	muqli	'fried' (masc.)	muqli: a	'fried' (fem.)

VI. REMARKS ABOUT THE NOTATION

A. As was established above (Section I), the vowels /ɑ/ and /a/ are distinct phonemes. However, very often, they behave like allophones of the same phoneme, in the sense that they can be predicted from neighbouring consonants. For example, /ɑ/ usually occurs with emphatics, uvulars and /r/, whereas /a/ usually occurs with the rest of the consonants. When I am giving specific examples, no problems arise since either /ɑ/ or /a/ will fill a particular slot and not both. When I am giving general patterns, however, both vowel phonemes have to be included. For example the /CC$\overset{ɑ}{a}$C/ pattern would include such examples as /s̤̈tol/ 'bucket' and /ʒbal/ 'mountain'. To avoid such awkward notation as ($\overset{ɑ}{a}$), I propose to use a capital (A) for those general patterns including the two vowel phonemes under discussion. For example, the /CC$\overset{ɑ}{a}$C/ pattern would be replaced by /CCAC/. (A) would then yield either /ɑ/ or /a/ depending on the neighbouring consonants. If the vowel phoneme cannot be predicted from neighbouring consonants, it will then be specified as being either /ɑ/ or /a/.

B. A colon after a vowel indicates length.

Example: ba:b 'door'

Similarly, a colon after a consonant indicates gemination.

Example: fum: 'mouth'

CHAPTER II : OUTLINE OF MORPHOLOGY

I. MORPHOLOGY OF THE VERB

Ia. Finites

Two moods can be distinguished: the indicative and the imperative. The imperative is restricted to two persons: second person singular and second person plural.

Examples: iktib 'write!', singular

iktbu 'write!', plural

For the indicative, two aspects can also be distinguished: the perfect and the imperfect. The perfect indicates the past.

Example: lba:riñ mʃa ltu:nis 'yesterday he went to Tunis'

The imperfect indicates the present, the future or the past.

Examples: Present hu:a yħib: lqra:ya 'he likes reading'

Future ðudwa nimʃi:u lʃ:oṭ: 'Tomorrow we'll go to the beach'

Past hu:a yoqra wa ṣo:ħbu ʒa 'he was reading when his friend arrived'

The verb is inflected for person and number (singular and plural). Third person singular verbs are also inflected for gender (masculine and feminine). This is illustrated by the following paradigm of the verb /iktib/ 'write':

Singular	Perfect	Imperfect	Imperative
1m.f.	ktib t	n iktib	
2m.f.	ktib t	t iktib	iktib
3m.	ktib	y iktib	
3f.	kitb it	t iktib	
Plural			
1m.f.	ktib na	n iktb u	
2m.f.	ktib tu	tiktb u	iktb u
3m.f.	kitb u	y iktb u	

Two main types of verbs can be distinguished: simple verbs and derived verbs. Throughout, I shall quote the form of the imperative.

A. Simple verbs

1. VCCV(C) Pattern

(a) VCCVC verbs

(i) 'Full' tri-consonantal verbs (ie. those with three lexically predicted consonants, none of which is a semi-vowel)

Examples: iktib 'write'

uxruʒ 'go out'

(ii) 'Weak' tri-consonantal verbs (ie. those with an initial semi-vowel)

Examples: uwzin 'weigh'

iybis 'harden'

(b) VCCV verbs

(i) 'Full' bi-consonantal verbs

Examples: iʃri 'buy'

ɑqrɑ 'read'

(ii) 'Weak' bi-consonantal verbs

Examples: uwfa 'finish'

uwħi 'have a vision'

2. $C\overline{V}C$ Pattern

(a) CVC: verbs

Examples: sub: 'pour'

bil: 'wet'

(b) CV:C verbs

Examples: qu:l 'say'

zi:d 'add'

3. CVCCV(C) Pattern

(a) CVCCVC verbs

(i) 'Full' verbs

Example: farkas 'search'

(ii) 'Weak' verbs

Examples: duwbil 'fail' (an exam)

xalwaḍ 'talk nonsense'

waʃwaʃ 'whisper'

(iii) Reduplication

Example: daqdaq 'knock'

(iv) Partial reduplication

Example: qarqaʃ 'scrub'

(b) CACCi verbs

(i) 'Full' verbs

Example: sarbi 'wait upon'

(ii) 'Weak' verbs

Example: maʕwi 'miaow'

Exceptions to this first type will be considered later. They correspond to certain Classical Arabic 'hamzated' verbs.

B. Derived verbs

The following classification of derived verbs follows a well-established grammatical tradition for Classical Arabic. It is based on the morphological form of the verb rather than on meaning and it will be seen that the resulting classes of verbs need not be semantically homogeneous (Moore, 1979), though there may be a clear tendency for members of a class to have some characteristic semantic relation to their corresponding underived forms (where such forms exist).

1. Verbs with a geminated middle consonant

Traditionally these are called 'form II' verbs. In my terminology I follow D.Cohen (1975). Classical Arabic 'form II' verbs have an intensive and causative value. The dialect has retained the causative feature. Verbs corresponding to Classical Arabic intensive verbs, however, have the value of simple verbs in the dialect.

(a) <u>(C)AC:AC verbs</u>

Examples:	hob:at̪	'cause to get down'
	xow:af	'frighten'
	kal:am	'talk' (transitive)
	aðˤ:an	'call to prayer'
	kos:or	'break'

(b) <u>CAC:i verbs</u>

Examples:	ɣol:i	'boil' (cause to boil)
	qɑr:i	'teach'

2. <u>(C)A:CV(C) verbs</u>

These correspond to 'form III' verbs. They have the value of simple verbs in the dialect.

(a) <u>(C)A:CVC verbs</u>

Examples:	ʃa:rik	'take part'
	sa:maħ	'forgive'
	a:ðin	'give permission'

(b) <u>CA:Ci verbs</u>

Examples:	la:qi	'meet'
	da:wi	'take medecine'

The dialect does not have a form corresponding to Classical Arabic 'form IV'.

3. <u>t-affixed derived verbs</u>

(a) <u>t-prefixed simple verbs</u>

These correspond to 'form VII' verbs. Generally any transitive simple verb can become passive by the prefixation of /t/.

Examples:	tʒraħ	'be wounded'
	tʃra	'be bought'
	tʃad:	'be caught'
	tbaːʕ	'be sold'
	tfarkas	'be searched'

It will be seen, nonetheless, that not every t-prefixed simple verb has a passive value.

(b) t-prefixed verbs with a geminated middle consonant

These correspond to 'form V' verbs. Generally, they are the reflexive or passive of verbs with a geminated middle consonant.

Examples:	tʕol:oq	'be hung'
	tdaf:a	'warm yourself'

Sometimes they are the intransitive counterparts of transitive verbs.

Examples:	kal:am	'talk' (tr.)
	tkal:am	'talk' (intr.)

(c) t-prefixed (C)A:CV(C) verbs

These correspond to 'form VI' verbs. Generally, they have a reflexive or intransitive value.

Examples:	ʕa:win	'help'	tʕa:wnu	'help each other'
	ra:ni	'train' (tr.)	tra:na	'train' (intr.)

(d) t-infixed verbs

These correspond to 'form VIII' verbs. They have the value of simple verbs.

Examples:	nthor	'commit suicide'
	ħta:ʒ	'need'
	ħtal:	'conquer'
	iʃthi	'fancy'

(e) st-prefixed verbs

These correspond to 'form X' verbs. They are not very common and generally have the value of simple verbs.

Examples:	staʃmor	'colonize'
	stan:a	'wait'
	stadʕa	'invite'
	stfa:d	'benefit'
	stqol:	'become independent'

(f) CCA:C verbs

These correspond to 'form IX' verbs. They are derived from adjectives.

Examples: bya:ḍ 'become white'

xya:b 'become ugly'

ṭwa:l 'become tall'

ʕqa:l 'become well-behaved'

Ib. Participles

Generally transitive simple verbs (excepting the CVCCV(C) type) have both active and passive participles which are different in form. Intransitive simple verbs,on the other hand, have active participles only.

Examples: iktib 'write', tr.

ka:tib 'writing', active participle

maktu:b 'written', passive participle

uxruʒ 'go out', intr.

xa:riʒ 'going out', active participle

Furthermore, for the CVCCV(C) verbs and the derived verbs, active and passive participles are the same in form.

Examples: ṭarʃaq 'explode', tr. mṭarʃaq , participle

sa:maħ 'forgive', tr. msa:maħ, participle

tak:i 'lean', tr. mtik:i, participle

saf:aq 'clap', intr. msaf:aq, participle

Finally, the form of the participle varies according to the underlying form of the verb.

Participles, like adjectives and nouns (see below), are inflected for number (plural). Similarly, like adjectives and certain nouns (see below), they are inflected for gender (feminine). The uninflected participle is in the masculine singular. The feminine is formed by

the suffixation of (A), the plural by the suffixation of /i:n/.

Examples:	Uninflected participle		Feminine	Plural
	ka:tib	'writing'	ka:tb a	ka:tb i:n
	ma:ʃi	'going'	ma:ʃ a	ma:ʃ i:n

Participles, both active and passive, may occur as nouns and adjectives.

Examples:		
	ka:tib	'secretary'
	mosru:f	'pocket money'
	ɣa:li	'expensive'
	mahbu:l	'crazy'

II. MORPHOLOGY OF THE NOUN

Some nouns are derived either synchronically or historically from other stems.

Examples:			
Historical derivations:	muɣun:i	'singer'
	maktib	'school'
	mufaq:id	'inspector'
	bqi:a	'change'
	ʃahri:a	'salary'
Synchronic derivations:	sbaːbt i	'shoe repairer'
	qahwa: ʒi	'waiter'

Verbal nouns are synchronically derived from verbs.

Examples:	Verbs		Verbal nouns	
	uʃrub	'drink'	ʃurb	'drinking'
	urqud	'sleep'	rqa:d	'sleeping'

Nouns ending in a consonant, an /u/ vowel or an /i/ vowel are usually in the masculine gender.

Examples:		
	ʃib:a:k	'window'
	ba:nu	'bath tub'
	karni	'notebook'

There are, however, a few exceptions.

Nouns ending in (A), on the other hand, are usually in the feminine.

Examples:	bagra	'cow'
	karhba	'car'

There are also a few exceptions.

'Male'nouns, mass and collective nouns and verbal nouns usually form their feminine by the suffixation of (A).

Examples:	qaṭ:u:s	'male cat'	qaṭ:u:s a	'female cat'
	xubz	'bread'	xubz a	'loaf of bread'
	tif:a:ħ	'apple'	tif:a:ħ a	'an apple'
	tangi:z	'jumping'	tangi:z a	'jump'

Some nouns can form duals. They do so by the suffixation of /i:n/.

Examples:	ba:b	'door'	ba:b i:n	'two doors'
	ka:s	'glass'	ka:s i:n	'two glasses'

Some historically dual nouns have the value of plural nouns in the dialect.

Examples:	ʕi:n	'eye'	ʕi:n i:n	'eyes'
	wɔin	'ear'	wiɔn i:n	'ears'

Nouns are inflected for number (plural). 'Female' nouns, feminine nouns of mass and collective nouns and feminine nouns of verbal nouns form their plural by the suffixation of /A:t/.

Examples:	bhi:ma	'female donkey'	bhi:m a:t	'female donkeys'
	xubza	'loaf of bread'	xubz a:t	'loaves of bread'
	burdga:na	'orange'	burdga:n a:t	'oranges'
	banya	'building'	bany a:t	'buildings'

For other nouns the plural is generally not predictable from the singular. Identical singular patterns may have different plural

forms.

Examples:	sabta	'belt'	sbit	'belts'
	qahwa	'café, cup of coffee'	qha:wi	'cafés, cups of coffee'
	nazma	'star'	nzu:m	'stars'
	ʕaḍma	'egg'	ʕaḍm a:t	'eggs'

Some plural patterns are, however, more likely than others.

III. MORPHOLOGY OF THE ADJECTIVE

Adjectives are inflected for gender (feminine), number (plural), comparative and superlative. They are not inflected for dual. Uninflected adjectives are in the masculine singular.

Examples:	ba:hi	'nice'
	qwi	'strong'

Adjectives, like participles and some nouns, form their feminine by the suffixation of (A).

Examples:	fqi:r	'poor'	fqi:r *a*
	mur:	'sour'	mur: *a*

As in the case of nouns, the plural is generally not predictable from the singular. Identical singular patterns may have different plural forms.

Examples:	Singular	Plural	
	qsi:r	qsa:r	'short'
	mri:ḍ	murḍa	'ill'
	fqi:r	fqa:ra	'poor'
	ʒdi:d	ʒdud	'new'

Some plural patterns are more likely than others.

Adjectives form the comparative degree either by the addition of a 'post adjectival phrase' (Talmoudi, 1979),

Examples: haʃ:a:m ɑkθɑr 'shier'

miðyɑ:r ɑkθɑr 'more jealous'

or by inflection.

Examples:	kbi:r	'old, big'	ɑkbɑr	'older, bigger'
	xɑ:yib	'ugly'	ɑxyab	'uglier'
	sẖi:ẖ	'strong, right'	ɑsɑẖ:	'stronger, more correct'
	ɣni	'rich'	ɑɣna	'richer'

When it is immediately followed by the noun which it qualifies, the comparative may have a superlative value.

Example: hu:a ɑsɣɑr wlid flqɑsm 'he is the youngest (boy) in the class'

IV. CLITICS

Those words in the dialect which are 'bound' and which are not inflectional affixes, are called clitics. This definition is drawn from Zwicky and Pullum (1981). Following these authors I have classified clitics as 'simple' clitics, 'special' clitics and 'bound' words. 'Simple' clitics include prepositions, conjunctions, interrogative particles and the article.

Examples: Preposition:

min 'from' [xróʒ m^{ə}l^{ə}blá:d] 'he left the country'

Conjunction:

wa 'and' [rá:ʒil w^{ə}mrá] 'a man and a woman'

Interrogative:

aːʃ 'what' [ʃ^{ə}thíb:] 'what do you want?'

Article:

(i)l [sák:ɑr lbá:b] 'close the door'

'Special' clitics include direct object pronouns, indirect object pronouns and genitive pronouns.

Exampamples Direct object pronouns

fhim ha 'he understood her'

ʕtɑ: hu: lu 'he gave it to him'

Indirect object pronouns

bʕaθ li ʒwa:b 'he sent me a letter'

ʃra: lu ʃukla:tɑ 'he bought him chocolate'

Genitive pronouns

kta:b ha 'her book'

dɑ:r na 'our house'

mta:ʕ i 'mine'

'Bound words' include the interrogative particle /ʃi/ and the negative particle /ma...ʃ/.

Examples: ba:hi: ʃi lfi:lim 'is it a good film?'

ma mʃa:ʃ 'he didn't go'

CHAPTER III : MORPHOLOGY OF THE VERB

I. SUBJECT AFFIXES

(a) Prefixes

Person prefixes belong to the imperfect only:

/n/ = 1st

/t/ = 2nd

/t/ = 3rd feminine

/y/ = 3rd (other)

Examples:

n iktib	'I write'
t iktib	'you (sing.) write'
y iktib	'he writes'
t iktib	'she writes'
n iktb u	'we write'
t iktb u	'you (pl.) write'
y iktb u	'they write'

The reason that I treat /i/ in /niktib/ as part of the stem and not the prefix, will be made clear in a later section, 'Underlying form of the stem'.

(b) Suffixes

Person suffixes belong both to the indicative and imperative moods.

1. Imperfect and imperative

Singular = ϕ

Plural = -u

Examples:

n uʃrub	'I drink'
n uʃrb u	'we drink'
ku:l	'eat!' (sing.)
ku:l u	'eat!' (pl.)
y iʃri	' he buys'
y iʃri: u	'they buy'

In the last example the /i/ vowel is lengthened in accordance with rule (2) (Chapter I), that is the rule for vowel-lengthening.

2. Perfect

1 and 2 s. = t

3m. = ϕ

3f. = (i)t

1p. = na

2p. = tu

3p. = u

Examples:	xraʒ t	'I went out'	qri: t	'I read'
	xraʒ t	'you went out'	qri: t	'you read' (sing.)
	xraʒ	'he went out'	qra	'he read'
	xarʒ it	'she went out'	qra: t	'she read'
	xraʒ na	'we went out'	qri: na	'we read'
	xraʒ tu	'you went out'	qri: tu	'you read' (pl.)
	xarʒ u	'they went out'	qra: u	'they read'

Remark about the third person feminine suffix /(i)t/

/(i)t/ needs explaining at this point. The first element of the suffix, that is (i), is optional. It is always present in the underlying form of the suffix, but its actual pronunciation depends on the nature of the stem to which it is suffixed: if the stem ends in a consonant /(i)t/ is pronounced /-it/.

Example: ʃa:f it 'she saw'

If, on the other hand, the stem ends in a vowel, /(i)t/ is pronounced /-t/.

Example: qro: t 'she read'

(c) Rules

I shall now try and group together in the form of rules, all that has been said about subject affixes. The notation which I shall use is

that of Hudson's 'Word Grammar', so it will need some explanation for most readers. The rules are combined into a single complex entry in the grammar, which provides the basis for the entire morphological system of the verb. Throughout this entry the word in question is represented by the variable A, and each line defines some part of the total structure of A. For example, 'subclass (A): finite or participle' means "the subclass of A is either finite or participle," and 'form (A): $\{\phi$ or w$\}$ & X & $\{\phi$ or y$\}$' means " the form of A is a stem X, with an optional prefix w and an optional suffix y". The choices made in different lines are linked together by means of the letters and numbers in square brackets. Thus '[F] aspect (A): [P] perfect or [I] imperfect' means "if A is finite (represented by [F]), then its aspect is either perfect or imperfect, and these two choices can be referred to in other lines by means of the abbreviations [P] and [I] respectively." The dotted line separates the syntax (above) from the morphology (below).

Class (A)	:	verb
Subclass (A)	:	[F] Finite or [Pt] participle
[F] aspect (A)	:	[P] perfect or [I] imperfect
[F] person (A)	:	[1] first or [2] second or [3] third
[F] number (A)	:	[s] singular or [p] plural
[3&S] gender (A)	:	[m] masculine or [f] feminine
[2&I] mood (A)	:	[imp] imperative or [ind] indicative

- -

Form (A)	:	$\{\phi$ or w$\}$ & X & $\{\phi$ or y$\}$	
Structure (w)	:	[P] ϕ	
		or [I] C', C' = [1]	/n/
		or [2 & not imp]	/t/
		or [3 & fem]	/t/
		or [imp]	/ϕ/
		or [other]	/y/

Structure (y) : $\{\phi \text{ or } v'\}$ & $\{\phi \text{ or } C''\}$ & $\{\phi \text{ or } v''\}$

[p & not P & 1]	v"	= /u/
[P & s & {1 or f}]	C"	= /t/
[P & 3 & f]	v'	= /i/ if the stem ends in a consonant.
[P & 1 & p]	C"	= /n/, v" = /a/
[P & 2]	C"	= /t/

II. UNDERLYING FORM OF THE STEM : ADVANTAGES OF IMPERATIVE AS UNDERLYING FORM

Unlike earlier descriptions of Arabic which used the third person of the perfect aspect as the basis for describing the verb, (eg. ktib 'he wrote') I propose to take the imperative as the underlying form.

Let us take /ktib/ as a first example. If we were to assume that /ktib/ is the underlying form, it seems quite easy to predict the vowels of any verbs which belong to its paradigm. /niktib/ 'I write' is /ktib/ prefixed with a subject prefix /n/ and an /i/ prefix which is similar to the radical /i/. However, if we now turn to another example of the same type, /ʃṭaħ/ 'he danced', and follow the same method, the corresponding imperfect should be */naʃṭaħ/ when in fact it is /niʃṭaħ/ 'I dance'.

Another example might belong to what is traditionally called the 'middle-weak verb' type or to the $C\overline{V}C$ type in my classification (Chapter II). If we took the perfect as the basis for describing the verb, it would be very difficult indeed to predict the imperfect paradigm from such roots as:

ʃa:f	'he saw'
ba:ʕ	'he sold'
xa:f	'he was afraid'

when we know that the corresponding imperfect forms are:

yʃu:f 'he sees'

ybi:ʕ 'he sells'

yxa:f 'he is afraid'

Let us now take the imperative as the underlying form. /iʃṭaħ/ corresponds to the iCCaC pattern. The imperfect does not raise any problems since only subject affixes need to be added (with some deletion of vowels, following regular rules):

Examples: n iʃṭaħ 'I dance'

y iʃṭħ u 'they dance'

As for the perfect, the statistics (which will be given below) show that iCCaC normally has CCaC as its perfect:

Examples: ʃṭaħ 'he danced'

ʃṭaħ t 'you danced' (sing.)

Similarly, the imperative for /ʃa:f/, /ba:ʕ/ and /xa:f/ are /ʃu:f/: Cu:C, /bi:ʕ/: Ci:C and /xa:f/: Ca:C respectively. Once more the imperfect does not raise any problems. The Cu:C pattern corresponds to the perfect:

3 person = CA:C

elsewhere= CuC

Ci:C corresponds to the perfect:

3 person = CA:C

elsewhere= CiC with a few exceptions (see below under 'Statistics').

The Ca:C pattern which is itself an exception, /xa:f/ being the only example, corresponds to the perfect:

3 person = Ca:C

elsewhere= CuC

The imperative as the underlying form seems to have many advantages over other possible forms since it enables us to predict any vowels in the paradigm.

III. STATISTICS AND SIMPLE VERBS

In order to compile a fairly comprehensive list of verbs, I have used two sources: firstly, a bilingual French-Arabic glossary (L'Arabe Fonctionnel, 1976); secondly, my own intuitions as a native speaker.

A. VCCV(C) pattern

(a) VCCVC verbs

1. 'Full' verbs

In total I had one hundred and ninety-two verbs with which to work. According to the imperative vowel system, the above-mentioned verbs have seven different patterns:

Table I

Pattern	Number of Verbs	Examples	
əCCəC	31	əhbəṭ	'get down'
əCCaC	5	əʕmal	'do, make'
aCCaC	1	alħas	'lick'
iCCəC	19	iʃtəḥ	'dance'
iCCaC	17	inbaḥ	'bark'
iCCiC	67	iqbil	'accept'
uCCuC	52	uḍhur	'appear'

(i) əCCəC pattern

All thirty-one verbs have a single corresponding perfect pattern: CCəC.

Example: hbəṭ 'he got down'

(ii) əCCaC pattern

Out of five verbs four have a CCaC perfect pattern,

Example: ʕmal 'he did, made'

and the remaining verb has a CCiC perfect pattern:

ʕkis 'he refused' , which is listed separately in the lexicon.

(iii) aCCaC pattern

The only verb belonging to this pattern has a CCaC perfect pattern:

lñas 'he licked'

(iv) iCCaC pattern

All nineteen verbs have a CCaC perfect pattern.

Example: ʃṭaḥ 'he danced'

(v) iCCaC pattern

All seventeen verbs have a CCaC perfect pattern.

Example: nbañ 'it barked'

(vi) iCCiC pattern

All sixty-seven verbs have a CCiC perfect pattern.

Example: qbil 'he accepted'

(vii) uCCuC pattern

This last pattern raises a problem which can be solved by means of abstract notation. uCCuC corresponds to three different perfect patterns. Thirty-four out of the fifty-two verbs have a CCAC perfect pattern.

Example: mʃaṭ 'he combed'

Sixteen verbs have a CCuC perfect pattern.

Example: ðhur 'he appeared'

The remaining two verbs have a CCiC perfect pattern:

skit 'he stopped talking'

knis 'he swept the floor'

This awkward situation can be solved by stating three different underlying forms instead of one, (ie. uCCaC, uCCuC and uCCiC)and having a rule which states the following:

Rule (1): The second vowel of the underlying form is pronounced /u/ in the imperfect and the imperative if the first vowel is /u/.

2. 'Weak' verbs

For all simple verbs, the distinction between 'full' verbs and 'weak' verbs is irrelevant to the morphology since semi-vowels act as 'full' consonants.

Nine verbs make up the whole list for this type of verb. To each imperative pattern corresponds a single perfect pattern.

(i) uwCiC pattern

Seven verbs belong to this pattern.

Example: uwṣil 'arrive'

All seven verbs have a wCiC corresponding perfect pattern.

Example: wṣil 'he arrived'

(ii) uwCaC pattern

Only one verb belongs to this pattern: uwʒaʕ 'hurt'. It has a wCaC perfect pattern /wʒaʕ/ 'he hurt'.

(iii) iyCiC pattern

Similarly, only one verb belongs to this pattern: iybis 'harden'. It has a yCiC perfect pattern: /ybis/ 'he hardened'.

Table II : Summary of the patterns (including 'full' and 'weak' verbs

PERFECT VOWELS \ IMPERATIVE VOWELS	ɑ-ɑ	ɑ-a	a-a	i-ɑ	i-a	i-i	u-ɑ	u-a	u-u	u-i
ɑ	31			19			34			
a		4	1		17			1		
i		1				68				9
u									16	

This table clearly shows the advantages of taking the imperative as the underlying form. Indeed, to take just one example, it would be quite difficult to predict the vowels of the imperfect or the imperative if we started from perfect /ɑ/ (top row). There would be no way of knowing whether /ɑ/ should correspond to /ɑ-ɑ/ or /i-ɑ/ or /u-ɑ/.

(b) VCCV verbs

1. 'Full' verbs

In total I had fifty-four verbs with which to work. The patterns wer as follows:

Table III

Pattern	Number of Verbs	Examples	
ɑCCɑ	7	ɑbrɑ	'recover'
ɑCCa	8	ɑsfa	'be clear'
iCCa	6	ibda	'begin'
iCCɑ	1	itrɑ	'be soft'
ɑCCi	9	ɑðli	'boil'
iCCi	23	imʃi	'go, walk'

The table below (Table IV) shows the corresponding perfect for each pattern. For example, the top row shows that all seven verbs belonging to the ɑCCɑ type, have CCɑ as their corresponding perfect pattern. The fifth row shows that out of nine verbs of the ɑCCi pattern, six have a CCa perfect pattern and three have a CCɑperfect pattern (the latter, whenever the final consonant is emphatic).

Table IV

Number of Verbs	Imperative	Perfect	Examples		Exceptions
7	ɑCCɑ	CCo	brɑ	'he recovered'	
8	ɑCCa	CCa	sfa	'he became clear'	
6	iCCa	CCa	bda	'he began'	
1	iCCɑ	CCɑ	trɑ	'he became soft'	
9	oCCi	CCa	ðla	'it boiled'	3xCCɑ, eg. ʕtɑ 'he gave
23	iCCi	CCa	mʃa	'he went, walked'	1ẋCCɑ, eg. sqɑ 'he wated'.

The following table summarises the patterns mentioned above.

Table V

IMPERATIVE VOWELS

PERFECT VOWELS	ɑ-ɑ	ɑ-a	i-a	i-ɑ	ɑ-i	i-i
ɑ	7			1	3	1
a		8	6		6	22

2. 'Weak' verbs

Two verbs and two patterns constitute this type. They are:

(i) uwCa = uwfa 'finish'

(ii) uwCi = uwħi 'have a vision'

The corresponding perfect patterns are:

(i) wCa = wfa 'he finished'

(ii) wCa = wħa 'he had a vision'

These verbs can be included in the preceding type since the semi-vowel acts in the same way as a consonant. The above table (V) can be expanded thus:

Table VI

Table VI

IMPERATIVE VOWELS

PERFECT VOWELS	ɑ-ɑ	ɑ-a	i-a	i-ɑ	ɑ-i	i-i	u-a	u-i
ɑ	7			1	3	1		
a		8	6		6	22	1	1

B. CVC pattern

(a) CVC: verbs

Out of forty-five verbs, twenty-six have a CiC: underlying (imperative) pattern.

Example: ʃid: 'catch'

The remaining nineteen verbs have a CuC: underlying pattern.

Example: qus: 'cut'

1. CiC: pattern

Twenty-three verbs have a CaC: corresponding perfect pattern.

Example: ʃad: 'he caught'

Three verbs have a CɑC: perfect pattern. They are:

qɑr: 'he admitted the truth'

xɑf: 'he became light'

qɑl: 'it became rare'

2. CuC: pattern

Fourteen verbs have a CɑC: corresponding perfect pattern.

Example: qɑs: 'he cut'

Five verbs have a CaC: perfect pattern. They are:

fak: 'he snatched'

ʃak: 'he doubted'

ħak: 'he scratched'

dag: 'he stung'

kaħ: 'he coughed'

For both CiC: and CuC: patterns, /ɑ/ is encountered if either or both consonants are emphatic, uvular or /r/.

Table VII : Summary of CVC: patterns

	IMPERATIVE VOWELS		
PERFECT VOWELS		i	u
	ɑ	23	5
	a	3	14

(b) CV:C verbs

Out of fifty-nine verbs, thirty verbs have a Cu:C underlying pattern.

Example: ʃu:f 'look'

Twenty-nine verbs have a Ci:C underlying pattern.

Example: zi:d 'add'

1. Cu:C pattern

Nineteen verbs have a Ca:C corresponding perfect pattern.

Example: ʃa:f 'he looked'

Eleven verbs have a Cɑ:C perfect pattern.

Example: qɑ:l 'he said'

(For both Cu:C pattern and Ci:C pattern (below), /ɑ/ is encountered if the first consonant is emphatic, uvular or /r/, or if the last consonant is emphatic or /r/).

For the remaining persons (other than third) of the perfect, /u:/ is shortened.

Examples: qul t 'I said'

ʃuf na 'we saw'

2. Ci:C pattern

Seventeen verbs have a Cu:C corresponding perfect pattern.

Example: ṭa:r 'he flew'

Twelve verbs have a Ca:C perfect pattern.

Example: ʒa:b 'he brought'

For the remaining persons (other than third), -/i:/ is shortened.

Example: ʒib t 'I brought'

-/i:/ is changed to /u/ if the underlying form begins with an emphatic consonant.

Example: ḍuʕ t 'I was lost'

Here, the language behaves in an odd way. Indeed, for some verbs, two pronunciations seem possible. The first person singular of the perfect of /ṭi:r/, for example, can be either: ṭur t 'I flew'

or: ṭir t

The same applies to ṣi:ħ 'shout'. The first person plural of the perfect of /ṣi:ħ/ can be either: ṣuħ na 'we shouted'

or: ṣiħ na

This situation does not seem to be restricted to verbs including emphatic consonants since the same behaviour can be encountered in the following:

mu:t 'die'

mut:

'I died'

mit:

The same speaker may use both pronunciations interchangeably. However, this situation must not be confused with the one in which the following pairs exist:

qum t 'I got up'

qim t 'I lifted'

ruħ tu 'you went away', pl.

riħ tu 'you were lost', pl.

Indeed, each of these two pairs of verbs include two completely different verbs with different underlying forms:

qu:m 'get up'

qi:m 'lift'

ru:ħ 'go'

ri:ħ 'be lost'

3. Two verbs have the following underlying forms:

Cɑ:C xɑ:f 'fear'

Ca:C ba:t 'stay for the night'

The corresponding third person perfect patterns are respectively:

Cɑ:C xɑ:f 'he feared'

Ca:C ba:t 'he stayed for the night'

The remaining persons have /u/ for the Cɑ:C pattern

Example: xuf t 'I feared'

and /i/ for the Ca:C pattern.

Example: bit: 'I stayed for the night'

Table VIII : Summary of CV:C patterns

	IMPERATIVE VOWELS			
PERFECT VOWELS	uu	ii	ɑɑ	aa
aa	18	12		1
ɑɑ	12	17	1	

C. CVCCV(C) patterns

(a) CVCCVC verbs

For this type of simple verb, the imperative and the perfect always have the same pattern. Twenty-five verbs make up the list for this type.

1. 'Full' verbs

Out of seven verbs, three have a CaCCaC underlying (imperative) pattern.

Example: farkas 'search'

Two have a CəCCəC pattern.

Example: tərʃəq 'explode'

The remaining two verbs have a CəCCaC pattern.

Example: ðorbal 'sieve'

2. 'Weak' verbs

Out of seven verbs, one has a waCwaC underlying pattern: waʃwaʃ 'whisper'. Another verb has a CoCwəC pattern: xəlwəḍ 'talk nonsense'. Similarly, one verb has a CəyCəC pattern: səytər 'dictate'. Finally four verbs have a CuwCiC pattern.

Example: duwbil 'fail (an exam)'

3. Reduplication

Ten verbs including one 'weak' verb mentioned above, /waʃwaʃ/, have reduplicated syllables. Seven out of the ten verbs have a CəCCəC underlying pattern.

Examples: dəðdəð 'tickle'

məḍməḍ 'rinse (the mouth)'

The remaining three verbs have a CaCCaC pattern.

Example : waʃwaʃ 'whisper'

4. Partial reduplication

One verb out of two, has a CəCCəC underlying pattern: qərqəʃ 'scrub'. The other verb has a CaCCaC pattern: marmad 'spoil'.

The distinction between 'full' verbs, 'weak' verbs and reduplicated verbs is morphologically irrelevant since all three types behave in a similar morphological manner.

(b) CACCi verbs

These are not very common. I am aware of only six verbs, most of which are loan words.

Four verbs have the following underlying pattern: CaCCi.

Examples: sarbi 'wait upon'

maʕwi 'miaow'

fanti 'feign, pretend'

The remaining two verbs have a CoCCi pattern.

Example: morki 'score'

Note that /maʕwi/ is the only 'weak' verb of the six. The other five have three 'full' consonants.

IV. STATISTICS AND DERIVATIONAL MORPHOLOGY

As will be seen later, Classical Arabic derived forms generally have the value of simple forms in the dialect. Two oppositions make up the basis for the description of derived verbs (D. Cohen, 1975). The first opposition is the one between simple and derived verbs on the one hand, and verbs prefixed with /t/ on the other hand, the /t/ prefix generally changing any active form into either a passive or a reflexive or an intransitive counterpart. Variants of t-prefixed verbs include st-prefixed verbs and t-infixed verbs. The second opposition is the one between simple verbs on the one hand, and derived verbs on the other hand.

A. Verbs with a geminated middle consonant

One hundred and eighty-seven verbs constitute my list for this type of verb. According to the imperative vowel system, the above-mentioned verbs have the following patterns:

Table IX

Number of Verbs	Imperative	Examples	
(1)	aC:aC	aḍ:an	'call to prayer'
(59)	CaC:aC	kam:al	'finish'
		ʔay:as	'resign yourself'
(84)	CoC:oC	ʕoy:oṭ	'shout'
		sol:oḥ	'repair'
(21)	CoC:aC	xod:am	'employ'
		ɣol:af	'wrap'
(11)	CaC:i	sam:i	'give a name to'
(11)	CoC:i	ɣol:i	'boil'

Verbs corresponding to Classical Arabic intensive verbs have the value of simple verbs in the dialect.

Examples: ʕal:aq 'hang'

kas:ar 'break'

xal:i 'let, leave'

ɣan:i 'sing'

Generally speaking, these verbs do not have corresponding simple verbs. There are, however, a few exceptions.

Examples: usruf 'spend'

sar:af 'make change'

The dialect, however, has retained the causative feature of Classical Arabic 'form II' verbs. The rule in this case is very productive. It can be stated as follows:

Rule (2): For VCCVC verbs : CAC:AC

For VCCV verbs : CAC:i

For CVC: verbs : CAC:AC

For CV:C verbs :

(i) for Ci:C : CAY:AC

(ii) for Cu:C : CAW:AC

(iii)for Ca:C : CaY:aC

(iv) for Co:C : CoW:aC

Examples: ahbaṭ 'get down' hab:aṭ 'cause to get down'

ɑðli	'boil'	ðal:i	'cause to boil'
ħib:	'like'	ħab:ab	'cause to like'
ṫi:ħ	'fall'	ṫay:ɑħ	'cause to fall'
qu:m	'get up'	qow:am	'cause to get up'
ba:t	'stay for the night'	bay:at	'cause to stay for the night'
xɑ:f	'fear'	xɑw:ɑf	'cause to fear'

Theoretically, it is possible for any intransitive VCCV(C) verbs or $\overline{CVC}$ verbs to become causative. However, in practice it is more complicated than that. Indeed, to take the VCCVC type as an example, only eighty-three out of eighty-six intransitive verbs can become causative. The remaining three are: irgil 'shiver'

ɑħqɑd 'hate'

ɑʕkas 'refuse'

Out of thirty-eight verbs sharing both the intransitive and the transitive features, nineteencan be made into causatives while the remaining nineteen verbs cannot.

Finally, at least two transitive verbs have causative counterparts:

ɑkrɑh	'hate'	kor:ɑh	'cause to hate'
ilbis	'put on clothes'	lab:as	'cause to put on (clothes)'

Verbs with a geminated middle consonant can also be derived from nouns and adjectives containing two or three consonants (or four consonants if two of them are geminated).

Examples: ʃta	'winter'	ʃat:i	'get ready for the winter'
si:f	'summer'	sɑy:af	'get ready for the summer'
ʕirs	'wedding'	ʕar:ɑs	'get married'
zur:i:qɑ	'syringe'	zor:ɑq	'give an injection'
ɑzrɑq	'blue'	zor:ɑq	'cause to become blue'
twi:l	'tall'	tɑw:al	'cause to become tall'
xɑ:yib	'ugly'	xɑy:ab	'cause to become ugly'

Some verbs with a geminated middle consonant are consequential to the corresponding simple verb.

Examples:	ikɔ̀ib	'lie'	kaɔ̀:ab	'do not believe'
	uṣduq	'be truthful'	saḍ:aq	'believe'

Verbs corresponding to Classical Arabic 'hamzated verbs' (which will be studied in a later section), can be made into verbs with a geminated middle consonant in the following way:

ku:l	'eat'	wak:al	'feed'
xu:ɔ̀	'take'	wax:aɔ̀	'cause to take'
ra[1]	'he saw'	war:i	'show'

B. (C)A:CV(C) verbs

Thirty-two verbs make up my list for this type of verb.

Table X

Number of Verbs	Imperative	Examples	
19	Ca:CiC	wa:fiq	'agree'
7	Ca:CiC	qo:rin	'compare'
1	Ca:CaC	sa:maħ	'forgive'
1	a:CiC	a:ɔ̀in	'allow'
4	Ca:Ci	da:wi	'take medecine'

Generally these verbs do not have corresponding simple counterparts. They have the value of simple verbs.

Examples:	ʕa:win	'help'
	ħa:wil	'try'
	ṣa:fiħ	'shake hands'
	qa:bil	'meet'
	ʒa:zi	'reward'
	ra:ni	'train'

---

1. As will be shown below in Section V (sub-section A3), the imperative of /ra/ is suppletive.

However, some verbs do have corresponding simple verbs,

Examples: ɑlqɑ 'find' la:qi 'meet'

ɑrʒɑʕ 'come back' ra:ʒiʕ 'revise'

but they are very rare. A few verbs have corresponding nouns.

Examples: xṭɑr 'danger' xɑ:ṭir 'risk'

dwa 'medecine' da:wi 'take medecine'

C. t-affixed derived verbs

1. t-prefixed verbs

In general the prefixation of /t/ to certain forms (simple and derived) gives the latter a passive or reflexive value. However, as we shall see later, this is not always so.

(a) t-prefixed simple verbs

Any transitive simple verb can become passive by the prefixation of /t/. The rule is quite productive. Two steps are, however, necessary for the completion of the derivation.

Rule (3): The first step consists of finding the perfect stem (which corresponds to the third person masculine singular). The second step consists of prefixing /t/ to the output of the previous operation.

Thus:

Underlying form		Perfect stem		t-prefixed stem	
ɑʒrɑħ	'wound'	ʒrɑħ	'he wounded'	tʒrɑħ	'be wounded'
ɑqrɑ	'read'	qrɑ	'he read'	tqrɑ	'be read'
lim:	' gather together'	lam:	'he gathered together'	tlam:	'be gathered'
bi:ʕ	'sell'	ba:ʕ	'he sold'	tba:ʕ	'be sold'
ɣɑrbal	'sieve'	ɣɑrbal	'he sieved'	tɣɑrbal	'be sieved'
sarbi	'wait upon'	sarba	'he waited upon'	tsarba	'be waited upon'

Verbs such as /uwlid/, /uwriθ/ etc. behave in the same way.

Thus:

Underlying form		Perfect stem		t-prefixed stem	
uwlid	'give birth to'	wlid	'he gave birth to'	twlid	'be born'
uwriθ	'inherit'	wriθ	'he inherited'	twriθ	'be inherited'

Some verbs of this type, however, (ie. t-prefixed simple verbs) do not have corresponding simple verbs. Generally these verbs do not have a passive meaning.

Examples: tlha 'take care of'
tmanyak 'make fun of'
tfalsaf 'philosophise'

/tmad:/, on the other hand, has two meanings. The first meaning belongs to the passive of /mid:/ 'hand over', that is /tmad:/ 'be handed over'. The other meaning of /tmad:/ is 'lie down'. In this case, it does not have a corresponding simple verb.

(b) t-prefixed verbs with a geminated middle consonant

Generally, these are the reflexive or passive of verbs with a geminated middle consonant.

Examples:	ʕɑl:ɑq	'hang'	tʕɑl:ɑq	'be hung'
	rɑb:i	'bring up well'	trɑb:a	'be well brought up'
	ʃaʒ:aʕ	'encourage'	tʃaʒ:aʕ	'be courageous'
	daf:i	'warm'	tdaf:a	'warm yourself'

Some verbs of this type do not have corresponding verbs with a geminated middle consonant. Generally, these verbs have a reflexive value.

Examples: tnɔk:ɔr 'disguise yourself'
txɑy:al 'imagine'
tkay:af 'smoke'
tman:a 'wish'
tsɑw:ɔr 'picture, imagine'

/tsˑaw:ar/ 'imagine' is not to be confused with its homonym:

saw:ar 'paint, photograph' tsaw:ar 'be painted, photographed'.

Similarly some verbs with a geminated middle consonant do not have corresponding t-prefixed verbs. Here, I recognize a problem: how to predict which verbs do not have corresponding t-prefixed verbs.

Intransitive verbs cannot have a /t/ prefix. Most transitive verbs, on the other hand, can become passive or reflexive by the prefixation of /t/.

Examples: ħas:an 'improve' tħas:an 'be made better'

ʕar:i 'uncover' tʕar:a 'be uncovered'

Some transitive verbs, however, cannot have a /t/ prefix. The reason is not clear.

Examples: lab:as 'cause to put on' (clothes) * tlab:as

xal:i 'leave, let' * txal:a

Finally, a few verbs of this type do not have either a reflexive or a passive value. Rather, they are the intransitive counterparts of transitive verbs.

Examples: ħad:aθ 'tell' (transitive) tħad:aθ 'tell' (intransitive)

kal:am 'talk' (transitive) tkal:am 'talk' (intransitive)

(c) <u>t-prefixed (C)A:CV(C) verbs</u>

This type has a reflexive or intransitive value. Any transitive (C)A:CV(C) verb can have a /t/ prefix.

Examples: ʕa:win 'help' tʕa:wnu 'help each other'

ra:ni 'train' (tr.) tra:na 'train' (intr.)

la:qi 'meet' (tr.) tla:qa:u 'meet' (pl.) (intr.)

A few verbs of this type do not have corresponding (C)A:CV(C) verbs.

(The corresponding (C)A:CV(C) verbs, however, may exist in Classical Arabic).

Examples: t̪ɔa:rbu 'they hit each other'

tsa:lħu 'they made peace with each other'

tfa:hmu 'they agreed' (intr.)

2. <u>t-infixed verbs</u>

This type is comparatively rare. Its verbs have the value of simple verbs. Out of fifteen verbs five have the following imperative pattern: CtCoC.

Example: nthor 'commit suicide'

Two verbs have a CtCaC pattern.

Example: ʒtmaʕ (sing.)

ʒtamʕu (pl.) 'gather'

N.B. The imperfect and imperative paradigms for the above-mentioned patterns are:

<u>Singular</u>	<u>Imperfect</u>	<u>Imperative</u>
1	n CtCAC [nˀCtCÁC]	
2	t CtCAC [tˀCtCÁC]	CtCAC [CtCÁC]
3m	y CtCAC [yˀCtCÁC]	
3f	t CtCAC [tˀCtCÁC]	
<u>Plural</u>		
1	n CtACC u [nˀCtÁCC u]	
2	t CtACC u [tˀCtÁCC u]	CtACC u [CtÁCC u]
3	y CtACC u [yˀCtÁCC u]	

The remaining patterns will be included in the following table.

<u>Table XI</u>

Table XI

Number of Verbs	Imperative	Examples	
3	Cta:C	ħta:ʒ	'need'
2	Cto:C	xto:r	'choose'
		sto:d	'fish, hunt'
1	CtaC:	ħtal:	'conquer'
2	iCtCi	istwi	'straighten'
		iʃthi	'fancy'

The difference in the underlying form between the last two verbs and the rest belonging to this type (ie. the last two verbs have an initial vowel while the others do not), may be accounted for by the fact that these two verbs, due to their weak final consonants (/h/ for one verb and /w/ for the other) are treated as simple verbs of the iCCi type like /iʃri/ 'buy'. The imperfect paradigm for /iʃthi/ is thus:

Singular

1	n iʃthi	[n íʃthi]
2	t iʃthi	[t íʃthi]
3m	y iʃthi	[y íʃthi]
3f	t iʃthi	[t íʃthi]

Plural

1	n iʃthi: u	[n iʃthí: u]
2	t iʃthi: u	[t iʃthí: u]
3	y iʃthi: u	[y iʃthí: u]

Most examples of this type do not correspond to any simple verbs.

Examples:	nthor	'commit suicide'
	istwi	'straighten'
	xto:r	'choose'
	xtroʕ	'invent'

A few examples do.

Examples: hil: 'open' htal: 'conquer'

izmaʕ 'call together, gather', (tr.) ztamʕu 'gather' (intr.)

D. st-prefixed verbs

These are not very common and generally have the value of simple verbs.

Twenty-five verbs make up my list for this type of verb.

Table XII

Number of Verbs	Imperative	Examples	
7	staCCaC	staslam	'become Muslim'
4	staCCaC	staʃmar	'colonise'
3	staCCaC	staqbal	'welcome'
1	staC:a	stan:a	'wait'
2	staCCa	stabna	'adopt'
2	stCaC:	sthaq:	'need, deserve'
3	sta:CiC	sta:nis	'get used to'
1	stCa:C	stfa:d	'benefit'

Some st-prefixed verbs are derived from simple verbs,

Examples: aʕmal 'do' staʕmal 'use'

fi:d 'benefit' (tr.) stfa:d 'benefit' (intr.)

though most often, the latter are not recognised as part of the dialect (but rather an earlier version of Arabic).

Examples: staʕmar 'colonise'

stan:a 'wait'

stadʕa 'invite'

stqal: 'become independent'

sta:nis 'get used to'

They can also be derived from adjectives.

Examples: ðni 'rich' staðna 'become rich'

ra:zil 'manly' starzal 'become manly'

On the whole, however, st-prefixed verbs are very limited.

E. CCA:C verbs

These are derived from adjectives with the following patterns, indicating quality, defect, size or colour:

Adjectives	Examples		CCA:C verbs	
CCi:C	kbi:r	'big'	kbɑ:r	'become big, old'
CA:CiC	fa:tiħ	'light' (colour)	fta:ħ	'become light'
	ðɑ:miq	'dark' (colour)	ðma:q	'become dark'
ACCAC	ɑrṭɑb	'soft'	rṭɑ:b	'become soft'
Ci:C	ḍi:q	'narrow'	ḍya:q	'become narrow'

CCA:C verbs have a common semantic relationship; that is, they mean: 'become the relevant adjective'.

Examples: byɑ:ḍ 'become /ɑbyɑḍ/ white'

twa:l 'become /twi:l/ tall'

ʕqɑ:l 'become /ʕa:qil/ well-behaved'

xya:b 'become /xɑ:yib/ ugly'

Out of thirty verbs fourteen verbs have the following underlying pattern: CCɑ:C.

Example: sfɑ:r 'become yellow'

Sixteen verbs have a CCa:C pattern.

Example: sma:n 'become fat'

Some CCA:C verbs are in free variation with corresponding VCCVC verbs.

Examples:	ḍʕɑ:f	=	uḍʕuf	'become slim'
	kbɑ:r	=	ikbir	'become old, big'
	sma:n	=	ismin	'become fat'
	qda:m	=	iqdim	'become old' (of an object)
	θqɑ:l	=	uθqul	'become heavy'

V. PERFECT, IMPERFECT AND IMPERATIVE STEMS

A. Simple stems

1. VCCV(C) pattern

(A) VCCVC verbs

(a) Imperative, imperfect and perfect stems

These verbs behave in exactly the same way. In the singular imperative and in the singular imperfect, they have the same structure as the underlying form. In the plural, however, for both imperative and imperfect, that is whenever there is a suffix, the second vowel of the underlying form is deleted in accordance with the rule for final vowel deletion and metathesis (Rule (1), Chapter I). This has a phonotactic explanation: there is no such pattern as (C)VCCVCV in the dialect.

In the perfect, the sole vowel is constant throughout the paradigm. (The first vowel of the underlying form never appears in the perfect). In the third person of the feminine and the third person of the plural, that is whenever the suffix begins in a vowel, the middle consonant and the vowel undergo metathesis (Rule (1), Chapter I). Again, this has a phonotactic explanation: there is no CCVCV(C) pattern in the dialect. Of course, for both moods, subject affixes need to be added.

Let us now take /iktib/ 'write' as a first example and try to illustrate what has just been stated.

Underlying form : iktib

Imperative and imperfect : there are no changes in the underlying form for the singular persons.

Singular	Imperative	Imperfect
1		n iktib
2	iktib	t iktib
3m		y iktib
3f		t iktib

Note that the singular imperative does not have any subject affixes while the plural imperative (see below) does.

In the plural, the second vowel of the underlying form is deleted.

Plural	Imperative	Imperfect
1		n iktb u
2	iktb u	t iktb u
3		y iktb u

Note that subject suffixes (ie. /u/) are only present in the plural.

Perfect

The first vowel of the underlying form is deleted:

ktib 'he wrote'

The vowel is constant throughout the paradigm:

Singular	
1	kt<u>i</u>b t
2	kt<u>i</u>b t
3m	kt<u>i</u>b
3f	k<u>i</u>tb it
Plural	
1	kt<u>i</u>b na
2	kt<u>i</u>b tu
3	k<u>i</u>tb u

Furthermore, excepting the third person of the feminine and of the plural, there are no changes in the perfect paradigm.

In the third person of the feminine and the third person of the plural the middle consonant and the vowel undergo metathesis:

3f kitb it

3p kitb u

Notice that the suffixes /it/ and /u/ both begin in a vowel as opposed to /t/, /na/ and /tu/ which begin in a consonant.

To complete the illustration, I shall now turn to other examples, each of which represents one VCCVC pattern (including 'weak' patterns).

(i) <u>ɑCCɑC pattern</u>

Example: ɑḥbɑṭ 'get down'

This pattern corresponds to perfect CCɑC.

<u>Underlying form</u> : ɑḥbɑṭ

<u>Singular</u>	<u>Imperative</u>	<u>Imperfect</u>	<u>Perfect</u>
1		n ɑḥbɑṭ	ḥbɑṭ t
2	ɑḥbɑṭ	t ɑḥbɑṭ	ḥbɑṭ t
3m		y ɑḥbɑṭ	ḥbɑṭ
3f		t ɑḥbɑṭ	ḥɑbṭ it
<u>Plural</u>			
1		n ɑḥbṭ u	ḥbɑṭ na
2	ɑḥbṭ u	t ɑḥbṭ u	ḥbɑṭ tu
3		y ɑḥbṭ u	ḥɑbṭ u

(ii) <u>ɑCCaC pattern</u>

This corresponds to perfect CCaC (with the exception of /ɑʕkas/ which corresponds to perfect CCiC).

Example: ɑʕmal 'do, make'

<u>Underlying form</u> : ɑʕmal

Singular	Imperative	Imperfect	Perfect
1		n aʕmal	ʕmal t
2	aʕmal	t aʕmal	ʕmal t
3m		y aʕmal	ʕmal
3f		t aʕmal	ʕaml it
Plural			
1		n aʕml u	ʕmal na
2	aʕml u	t aʕml u	ʕmal tu
3		y aʕml u	ʕaml u

Underlying form : aʕkas 'refuse'

Singular	Imperative	Imperfect	Perfect
1		n aʕkas	ʕkis t
2	aʕkas	t aʕkas	ʕkis t
3m		y aʕkas	ʕkis
3f		t aʕkas	ʕiks it
Plural			
1		n aʕks u	ʕkis na
2	aʕks u	t aʕks u	ʕkis tu
3		y aʕks u	ʕiks u

(iii) aCCaC pattern

The only verb corresponds to perfect CCaC : alħas 'lick'.

Underlying form : alħas

Singular	Imperative	Imperfect	Perfect
1		n alħas	lħas t
2	alħas	t alħas	lħas t
3m		y alħas	lħas
3f		t alħas	laħs it

Plural	Imperative	Imperfect	Perfect
1		n alɦs u	lɦas na
2	alɦs u	t alɦs u	lɦas tu
3		y alɦs u	laɦs u

(iv) iCCoC pattern

This corresponds to perfect CCoC.

Example: iʃṭoɦ 'dance'

Underlying form : iʃṭoɦ

Singular	Imperative	Imperfect	Perfect
1		n iʃṭoɦ	ʃṭoɦ t
2	iʃṭoɦ	t iʃṭoɦ	ʃṭoɦ t
3m		y iʃṭoɦ	ʃṭoɦ
3f		t iʃṭoɦ	ʃoṭɦ it
Plural			
1		n iʃṭɦ u	ʃṭoh na
2	iʃṭɦ u	t iʃṭɦ u	ʃṭoh tu
3		y iʃṭɦ u	ʃoṭɦ u

(v) iCCaC pattern

This corresponds to perfect CCaC.

Example: inbaɦ 'bark'

Underlying form : inbaɦ

Singular	Imperative	Imperfect	Perfect
1		n inbaɦ	nbaɦ t
2	inbaɦ	t inbaɦ	nbaɦ t
3m		y inbaɦ	nbaɦ
3f		t inbaɦ	nabɦ it
Plural			
1		n inbɦ u	nbaɦ na

Plural	Imperative	Imperfect	Perfect
2	inbɦ u	t inbɦ u	nbaɦ tu
3		y inbɦ u	nabɦ u

(vi) iCCiC pattern

This corresponds to perfect CCiC.

Example: iqbil 'accept'

Underlying form : iqbil

Singular	Imperative	Imperfect	Perfect
1		n iqbil	qbil t
2	iqbil	t iqbil	qbil t
3m		y iqbil	qbil
3f		t iqbil	qibl it
Plural			
1		n iqbl u	qbil na
2	iqbl u	t iqbl u	qbil tu
3		y iqbl u	qibl u

(vii) uCCuC pattern

(a) uCCAC

This corresponds to perfect CCAC.

Example: umʃuṭ 'comb'

Underlying form : umʃaṭ

Singular	Imperative	Imperfect	Perfect
1		n umʃuṭ	mʃaṭ t
2	umʃuṭ	t umʃuṭ	mʃaṭ t
3m		y umʃuṭ	mʃaṭ
3f		t umʃuṭ	maʃṭ it
Plural			
1		n umʃṭ u	mʃaṭ na

Plural	Imperative	Imperfect	Perfect
2	um ʃ̣t u	t um ʃ̣t u	m ʃ̣at tu
3		y um ʃ̣t u	ma ʃ̣t u

(vii) (b) uCCuC

This corresponds to perfect CCuC.

Example: uḍ̣hur 'appear'

Underlying form : uḍ̣hur

Singular	Imperative	Imperfect	Perfect
1		n uḍ̣hur	ḍ̣hur t
2	uḍ̣hur	t uḍ̣hur	ḍ̣hur t
3m		y uḍ̣hur	ḍ̣hur
3f		t uḍ̣hur	ḍ̣uhr it
Plural			
1		n uḍ̣hr u	ḍ̣hur na
2	uḍ̣hr u	t uḍ̣hr u	ḍ̣hur tu
3		y uḍ̣hr u	ḍ̣uhr u

(vii) (c) uCCiC

This corresponds to perfect CCiC.

Example: uskut 'be quiet'

Underlying form : uskit

Singular	Imperative	Imperfect	Perfect
1		n uskut	skit t
2	uskut	t uskut	skit t
3m		y uskut	skit
3f		t uskut	sikt it
Plural			
1		n uskt u	skit na
2	uskt u	t uskt u	skit tu
3		y uskt u	sikt u

(viii) uwCiC pattern

This corresponds to perfect wCiC.

Example: uwṣil 'arrive'

Underlying form : uwṣil

Singular	Imperative	Imperfect	Perfect
1		n uwṣil	wṣil t
2	uwṣil	t uwṣil	wṣil t
3m		y uwṣil	wṣil
3f		t uwṣil	wiṣl it
Plural			
1		n uwṣl u	wṣil na
2	uwṣl u	t uwṣl u	wṣil tu
3		y uwṣl u	wiṣl u

(ix) uwCaC pattern

This corresponds to perfect wCaC.

Example: uwʒaʕ 'hurt'

Underlying form : uwʒaʕ

Singular	Imperative	Imperfect	Perfect
1		n uwʒaʕ	wʒaʕ t
2	uwʒaʕ	t uwʒaʕ	wʒaʕ t
3m		y uwʒaʕ	wʒaʕ
3f		t uwʒaʕ	waʒʕ it
Plural			
1		n uwʒʕ u	wʒaʕ na
2	uwʒʕ u	t uwʒʕ u	wʒaʕ tu
3		y uwʒʕ u	waʒʕ u

(x) iyCiC pattern

This corresponds to perfect yCiC.

Example: iybis 'harden'

Underlying form : iybis

Singular	Imperative	Imperfect	Perfect
1		n iybis	ybis t
2	iybis	t iybis	ybis t
3m		y iybis	ybis
3f		t iybis	yibs it
Plural			
1		n iybs u	ybis na
2	iybs u	t iybs u	ybis tu
3		y iybs u	yibs u

(b) Rules for VCCVC verbs

The rules given in Section I (Subject affixes) may now be applied to VCCVC verbs.

(1) Word : A

Lexeme (A) : A

Form (A) : Z

Structure (Z) : V1 & C1 & C2 & V2 & C3

(2) Word : A

Class (A) : verb

Subclass (A) : [F] finite or [Pt] participle

[F] aspect (A) : [P] perfect or [I] imperfect

[F] person (A) : [1] first or [2] second or [3] third

[F] number (A) : [s] singular or [p] plural

[3 & s] gender (A) : [m] masculine or [f] feminine

[2 & I] mood (A) : [imp] imperative or [ind] indicative

- - - -

Form (A) : {ϕ or W} & X & {ɟ or Y}

Structure (X) : [I or imp] = structure (Z)

or [P] = structure (Z)

except that

V1 : ϕ

(3) Meaning (A′) : 'write' 'arrive'

V1 (A′) = i u

C1 (A′) = k w

C2 (A′) = t s

V2 (A′) = i i

C3 (A′) = b l

(B) VCCV verbs

(a) Imperative, imperfect and perfect stems

As in the case of the preceding type, in the imperfect and imperative, these verbs have the same structure as the underlying form. In the plural of both imperfect and imperative, that is whenever there is a a suffix, the final vowel of the underlying form is lengthened. It thus follows the requirements of the phonotactics of the dialect and

the general rule for vowel lengthening (Rule (2), Chapter I).

In the perfect, the first vowel of the underlying form is always deleted. The predictable vowel of the third person of the singular and the plural is always A (see 'Statistics and simple verbs', Section III). Similarly, in the first and second persons of the singular and plural, that is whenever the suffix begins in a consonant, the vowel is alway /i/. The vowel of the perfect is also lengthened in accordance with Rule (2), Chapter I.

Let us take /ɑqrɑ/ 'reād' as an illustrative example.

Imperative and imperfect : there are no changes in the underlying form for the singular persons.

Underlying form : ɑqrɑ

Singular	Imperative	Imperfect
1		n ɑqrɑ
2	ɑqrɑ	t ɑqrɑ
3m		y ɑqrɑ
3f		t ɑqrɑ

In the plural, the final vowel is lengthened.

Plural	Imperative	Imperfect
1		n ɑqrɑ: u
2	ɑqrɑ: u	t ɑqrɑ: u
3		y ɑqrɑ: u

Perfect

/ɑqrɑ/ corresponds to perfect /qrɑ/. The vowel of the third person of the singular and plural for VCCV verbs is always A. For this particular example, it is /ɑ/:

3m qrɑ

3f qrɑ: t

3p qrɑ: u

In the first and second persons of the singular and plural, the vowel is always /i/.

Singular

1 qri: t

2 qri: t

Plural

1 qri: na

2 qri: tu

To complete the illustration, let us take a few other examples, each of which corresponds to a different pattern:

(i) ɑCCɑ pattern, corresponding to perfect CCɑ.

Example: ɑbrɑ 'recover'

(ii) ɑCCa pattern, corresponding to perfect CCa.

Example: ɑṣfa 'be clear'

(iii) iCCa pattern, corresponding to perfect CCa.

Example: ibda 'begin'

(iv) iCCɑ pattern, corresponding to perfect CCɑ.

Example: iṭrɑ 'become soft'

(v) ɑCCi pattern, corresponding to perfect CCA (see Section III).

Example: ɑðli 'boil'

(vi) iCCi pattern, corresponding to perfect CCA (see Section III).

Example: imʃi 'go, walk'

(vii) uwCa, corresponding to perfect wCa.

Example: uwfa 'finish'

(viii) uwCi, corresponding to perfect wCa.

Example: uwɦi 'have a vision'

Singular	Imperative	Imperfect	Perfect
1		n ɔbrɑ	bri: t
2	ɔbrɑ	t ɔbrɑ	bri: t
3m		y ɔbrɑ	brɑ
3f		t ɔbrɑ	brɑ: t
Plural			
1		n ɔbrɑ: u	bri: na
2	ɔbrɑ: u	t ɔbrɑ: u	bri: tu
3		y ɔbrɑ: u	brɑ: u

Singular			
1		n ɔṣfa	ṣfi: t
2	ɔṣfa	t ɔṣfa	ṣfi: t
3m		y ɔṣfa	ṣfa
3f		t ɔṣfa	ṣfa: t
Plural			
1		n ɔṣfa: u	ṣfi: na
2	ɔṣfa: u	t ɔṣfa: u	ṣfi: tu
3		y ɔṣfa: u	ṣfa: u

Singular			
1		n ibda	bdi: t
2	ibda	t ibda	bdi: t
3m		y ibda	bda
3f		t ibda	bda: t
Plural			
1		n ibda: u	bdi: na
2	ibda: u	t ibda: u	bdi: tu
3		y ibda: u	bda: u

Singular	Imperative	Imperfect	Perfect
1		n itrɑ	tri: t
2	itrɑ	t itrɑ	tri: t
3m		y itrɑ	trɑ
3f		t itrɑ	trɑ: t
Plural			
1		n itrɑ: u	tri: na
2	itrɑ: u	t itrɑ: u	tri: tu
3		y itrɑ: u	trɔ: u

Singular			
1		n ɑðli	ðli: t
2	ɑðli	t ɑðli	ðli: t
3m		y ɑðli	ðla
3f		t ɑðli	ðla: t
Plural			
1		n ɑðli: u	ðli: na
2	ɑðli: u	t ɑðli: u	ðli: tu
3		y ɑðli: u	ðla: u

Singular			
1		n imʃi	mʃi: t
2	imʃi	t imʃi	mʃi: t
3m		y imʃi	mʃa
3f		t imʃi	mʃa: t
Plural			
1		n imʃi: u	mʃi: na
2	imʃi: u	t imʃi: u	mʃi: tu
3		y imʃi: u	mʃa: u

Singular	Imperative	Imperfect	Perfect
1		n uwfa	wfi: t
2	uwfa	t uwfa	wfi: t
3m		y uwfa	wfa
3f		t uwfa	wfa: t
Plural			
1		n uwfa: u	wfi: na
2	uwfa: u	t uwfa: u	wfi: tu
3		y uwfa: u	wfa: u

Singular			
1		n uwɦi	wɦi: t
2	uwɦi	t uwɦi	wɦi: t
3m		y uwɦi	wɦa
3f		t uwɦi	wɦa: t
Plural			
1		n uwɦi: u	wɦi: na
2	uwɦi: u	t uwɦi: u	wɦi: tu
3		y uwɦi: u	wɦa: u

One last example needs to be mentioned because it behaves in a different way: /ɑɦbu/ 'crawl' (of a baby). It is generally used in the third person of the singular: y ɑɦbu 'he crawls'

t ɑɦbu 'she crawls'.

But the whole aspectual paradigm is felt to be:

Singular	Imperative	Imperfect	Perfect
1		n ɑɦbu	ɦbi: t
2	ɑɦbu	t ɑɦbu	ɦbi: t
3m		y ɑɦbu	ɦba
3f		t ɑɦbu	ɦba: t

Plural	Imperative	Imperfect	Perfect
1		n ɑɦbi: u	ɦbi: na
2	ɑɦbi: u	t ɑɦbi: u	ɦbi: tu
3		y ɑɦbi: u	ɦba: u

(b) Rules for VCCV verbs

Structure (Z) : V1 & C1 & C2 & V2

Form (A) : {ϕ or W} & X & {ϕ or Y}

Structure (X) : [I or imp] = structure (Z)

or [P] = structure (Z)

except that

V1 : ϕ

[3] V2 = (A)

[1 & 2] V2 = /i/

Meaning (A′) :	'begin	'finish'
V1 (A′) =	i	u
C1 (A′) =	b	w
C2 (A′) =	d	f
V2 (A′) =	a	a

2. CVC pattern

(A) CVC: verbs

(a) Imperative, imperfect and perfect stems

In the imperative and imperfect, these verbs have the same structure as the underlying forms. The only feature that distinguishes the

singular forms from the plural forms is subject suffixes. This is due to the fact that CCVC:V is phonotactically possible.

In the perfect, the vowel is constant throughout the paradigm. In the first and second persons of the singular and plural, that is whenever the suffix begins with a consonant, /i/ is inserted between the final consonant and the subject suffix. The rule for vowel lengthening (Rule (2), Chapter I) lengthens the /i/ vowel immediately before a suffix. As for the rest of the perfect paradigm , the third person masculine, feminine and plural (whenever the suffix begins with a vowel, or is absent) the stem is similar to the underlying form, except for the vowel which can be predicted.

Let us now illustrate what has just been stated with /ɲib:/ 'like, love'.

Underlying form : ɲib:

/ɲib:/ corresponds to perfect /ɲab:/ (see Section III).

Singular	Imperative	Imperfect	Perfect
1		n ɲib:	ɲab: i: t
2	ɲib:	t ɲib:	ɲab: i: t
3m		y ɲib:	ɲab:
3f		t ɲib:	ɲab: it
Plural			
1		n ɲib: u	ɲab: i: na
2	ɲib: u	t ɲib: u	ɲab: i: tu
3		y ɲib: u	ɲab: u

Let us take a few other examples to complete the illustration.

Underlying forms		Corresponding perfect patterns
mis:	'touch'	mas:
qus:	'cut'	qos:

Singular	Imperative	Imperfect	Perfect
1		n mis: n qus:	mas: i: t qos: i: t
2	mis: qus:	t mis: t qus:	mas: i: t qos: i: t
3m		y mis: y qus:	mas: qos:
3f		t mis: t qus:	mas: it qos: it
Plural			
1		n mis: u n qus: u	mas: i: na qos: i: na
2	mis: u qus: u	t mis: u t qus: u	mas: i: tu qos: i: tu
3		y mis: u y qus: u	mas: u qos: u

(b) Rules for CVC: verbs

Structure (Z) : C1 & V1 & C2, length (C2) : long

Form (A) : {ϕ or W} & X & {ϕ or Y}

Structure (X) : = structure (Z)

except that

[P] V1 = (A)

& [P & {1 or 2}] structure (X) = Z & V2, V2 = /i/

Meaning (A′) :	'like'	'cut'
C1 (A′) =	h	q
V1 (A′) =	i	u
C2 (A′) =	b	s

(B) CV:C verbs

(a) Imperative, imperfect and perfect stems

Like the CVC: verb type, these verbs have the same structure as the underlying form in the imperative and the imperfect. Once again, only subject suffixes distinguish singular forms from plural forms: the pattern CCV:CV is phonotactically possible.

In the perfect, the situation is different. In the third person of the masculine, feminine and plural, that is whenever the suffix begins in a vowel or is absent, the radical vowel is always /A/ (see Section III). The situation is somewhat more complicated for the remaining persons, that is whenever the suffix begins in a consonant: for the pattern Cu:C, /u:/ is shortened. For the pattern Ci:C, however, there are two possibilities: /i:/ is shortened

/i:/ is replaced by /u/, if the underlying form begins in an emphatic consonant. (However, as was mentioned in Section III above, two different pronunciations of the same verb may occur). Finally, for the two patterns Ca:C and Ca:C, /a:/ is replaced by /u/ and /a:/ by /i/ respectively.

Let us now illustrate what has been said.

(i) Cu:C corresponds to perfect CA:C. In the third person of the perfect, the radical vowel is always /A/. In the first and second persons, however, for the Cu:C pattern, /u:/ is shortened. (ie. /u/)

Examples: qu:l 'say, tell'

su:q 'drive'

Underlying forms : qu:l

su:q

Singular	Imperative	Imperfect	Perfect
1		n qu:l n su:q	qul t suq t
2	qu:l su:q	t qu:l t su:q	qul t suq t
3m		y qu:l y su:q	qɑ:l sa:q
3f		t qu:l t su:q	qɑ:l it sa:q it
Plural			
1		n qu:l u n su:q u	qul na suq na
2	qu:l u su:q u	t qu:l u t su:q u	qul tu suq tu
3		y qu:l u y su:q u	qɑ:l u sa:q u

(ii) Ci:C also corresponds to perfect CA:C. In the third person of the perfect, the radical vowel is always /A/. The vowel of the first and second persons, however, is either /u/ or /i/, both short (see above and Section III).

Examples: ʒi:b 'bring'

ðḍi:ʕ 'be lost'

Underlying forms : ʒi:b

ðḍi:ʕ

Singular	Imperative	Imperfect	Perfect
1		n ʒi:b n ðḍi:ʕ	ʒib t ðuʕ t
2	ʒi:b ðḍi:ʕ	t ʒi:b t ðḍi:ʕ	ʒib t ðuʕ t
3m		y ʒi:b y ðḍi:ʕ	ʒa:b ðɑ:ʕ
3f		t ʒi:b t ðḍi:ʕ	ʒɑ:b it ðɑ:ʕ it
Plural			
1		n ʒi:b u n ðḍi:ʕ u	ʒib na ðuʕ na

Plural	Imperative	Imperfect	Perfect
2	ʒi:b u ðiːʕ u	t ʒi:b u t ðiːʕ u	ʒib tu ðuʕ tu
3		y ʒi:b u y ðiːʕ u	ʒa:b u ðaːʕ u

(iii) Co:C and Ca:C correspond to perfect Co:C and Ca:C respectively.

In the third person of the perfect, the radical vowels are /o/ and /a/. The vowels of the first and second persons are /u/, short, for Co:C pattern and /i/, short, for Ca:C pattern.

Examples: xo:f 'fear'

ba:t 'stay for the night'

Underlying forms : xo:f

ba:t

Singular	Imperative	Imperfect	Perfect
1		n xo:f n ba:t	xuf t bit t
2	xo:f ba:t	t xo:f t ba:t	xuf t bit t
3m		y xo:f y ba:t	xo:f ba:t
3f		t xo:f t ba:t	xo:f it ba:t it
Plural			
1		n xo:f u n ba:t u	xuf na bit na
2	xo:f u ba:t u	t xo:f u t ba:t u	xuf tu bit tu
3		y xo:f u y ba:t u	xo:f u ba:t u

(b) Rules for CV:C verbs

Structure (Z) : C1 & V1 & C2, length (V1) : long

Form (A) : {ϕ or W} & X & {ϕ or Y}

Structure (X) : = structure (Z)

except that

[P & {1 or 2}] V1 : short

& [P & 3] V1 = (A) instead of V1 (A')

Meaning (A') : 'say'

C1 (A') = q

V1 (A') = u

C2 (A') = l

3. <u>Verbs corresponding to certain Classical Arabic 'hamzated' verbs</u>

In their imperative forms (except for /rɑ/ (see below)), these are:

i:ʒa 'come'

rɑ 'he saw'

ku:l 'eat'

xu:ð 'take'

(The similarity between the last two verbs and verbs of the CV:C pattern, is only restricted to the imperative).

The corresponding Classical Arabic verbs are respectively:

dʒa:ʔa

raʔa:

ʔakala

ʔaxaðа

I propose to treat these verbs as exceptions due to the fact that, on the one hand, they are the only verbs of their kind, and on the other hand, each of them behaves in a different manner from any other type

of verb. This is mainly due to the fact that the glottal stop has disappeared almost completely in the dialect. The glottal stop does however, exist in some verbs.

Examples: is?il 'ask' yis?il 'he asks'

?ay:as 'resign yourself' y?ay:as 'he resigns himself'

/aɗ:an/ 'call to prayer', on the other hand, has lost its glottal stop since the third person singular of the imperfect is not

* y?aɗ:an

but yaɗ:an

(A) i:ʒa and rɑ

In the imperfect and in the perfect, /rɑ/ behaves like VCCV verbs. /ɑqrɑ/ 'read', for example, would be an exact replica, if we forgot about the first vowel and the first consonant.

Examples:

Singular	Imperfect	Perfect
1	n ɑqrɑ n ra	qri: t ri: t
2	t ɑqrɑ t rɑ	qri: t ri: t
3m	y ɑqrɑ y rɑ	qrɑ rɑ
3f	t ɑqrɑ t rɑ	qrɑ: t rɑ: t
Plural		
1	n ɑqrɑ: u n rɑ: u	qri: na ri: na
2	t ɑqrɑ: u t rɑ: u	qri: tu ri: tu
3	y ɑqrɑ: u y rɑ: u	qrɑ: u rɑ: u

The imperative of /rɑ/, however, is suppletive:

Singular : ʃu:f 'see'

Plural : ʃu:f u 'see'

Similarly, /i:ʒa/ may be compared with /iʃri/ 'buy', at least as far as vowel endings in the imperfect and perfect are concerned.

Singular	Imperfect	Perfect
1	n iʃri n ʒi	ʃri: t ʒi: t
2	t iʃri t ʒi	ʃri: t ʒi: t
3m	y iʃri y ʒi	ʃra ʒa
3f	t iʃri t ʒi	ʃra: t ʒa: t
Plural		
1	n iʃri: u n ʒi: u	ʃri: na ʒi: na
2	t iʃri: u t ʒi: u	ʃri: tu ʒi: tu
3	y iʃri: u y ʒi: u	ʃra: u ʒa: u

The imperative paradigm is the following:

Singular : i:ʒa 'come'

Plural : i:ʒa:u 'come'

(8) ku:l and xu:ð

These behave in a peculiar way. Indeed, in the imperfect they behave in a unique way, in the perfect like VCCV verbs and in the imperative like CV:C verbs.

Imperfect

The singular paradigms are as follows:

1	n a:kil	n a:xið
2	t a:kil	t a:xið
3m	y a:kil	y a:xið
3f	t a:kil	t a:xið

/n a:xiɔ/ and the rest of the singular paradigm of the imperfect for /xu:ɔ/ are in free variation with:

n a:xu

t a:xu

y a:xu

t a:xu

In the plural, that is whenever there is a suffix, the final vowel is deleted in accordance with the rule for final vowel deletion and metathesis (Rule (1), Chapter I):

1	n a:kl u	n a:xɔ u
2	t a:kl u	t a:xɔ u
3	y a:kl u	y a:xɔ u

Perfect

In the perfect, they may be compared to /ikri/ 'rent':

Singular

1	kri: t	kli: t	xɔi: t
2	kri: t	kli: t	xɔi: t
3m	kra	kla	xɔa
3f	kra: t	kla: t	xɔa: t

Plural

1	kri: na	kli: na	xɔi: na
2	kri: tu	kli: tu	xɔi: tu
3	kra: u	kla: u	xɔa: u

Imperative

In the imperative, they may be compared to /du:r/ 'turn':

Singular :	du:r	ku:l	xu:ɔ
Plural :	du:r u	ku:l u	xu:ɔ u

4. CVCCV(C) pattern

(A) CVCCVC verbs

(a) Imperative, imperfect and perfect stems

For both moods, from this pattern on (except those patterns which end in a vowel or in a geminated consonant or in a consonant immediately preceded by a long vowel) the only differenciating feature between members of the paradigms is subject affixes. Deletion of vowels and metathesis are accounted for by means of regular rules.

To return to CVCCVC verbs, in the plural of the imperfect and imperative, and in the third person feminine and plural of the perfect, that is whenever the suffix begins in a vowel, the final vowel of the underlying form is deleted in accordance with the rule for final vowel deletion and metathesis (Rule (1), Chapter I) and the phonotactics of the dialect : there is no CVCCVCV pattern. The vowels of the underlying form are constant throughout the whole aspectual paradigm.

I propose to take /farkas/ 'search' as an illustrative example.

Underlying form : farkas

Singular	Imperative	Imperfect	Perfect
1		n farkas	farkas t
2	farkas	t farkas	farkas t
3m		y farkas	farkas
3f		t farkas	farks it
Plural			
1		n farks u	farkas na
2	farks u	t farks u	farkas tu
3		y farks u	farks u

If the third consonant of a CVCCVC verb is /w/, it disappears at the

phonetic level and the consonant immediately preceding it is geminated and followed by [u] , whenever the suffix begins in a vowel.

Example: wakwak 'stammer'

Singular	Imperative	Imperfect	Perfect
1		[n wákwak]	[wakwák t]
2	wakwak [wákwak]	[t wákwak]	[wakwák t]
3m		[y wákwak]	[wakwák]
3f		[t wákwak]	[wák:uk it]
Plural			
1		[n wák:uk u]	[wakwák na]
2	wakwk u [wák:uk u]	[t wák:uk u]	[wakwák tu]
3		[y wák:uk u]	[wák:uk u]

CVCCVC verbs such as /duwbil/ 'fail' (an exam) and /riygil/ 'fix' where /w/ and /y/ are preceded by /u/ and /i/ respectively, are phonetically: [dú:bil]

[rí:gil]

(b) Rules for CVCCVC verbs

Structure (Z) : C1 & V1 & C2 & C3 & V2 & C4

Form (A) : $\{\phi$ or W$\}$ & X & $\{\phi$ or Y$\}$

Structure (X) : = structure (Z)

Meaning (A′) :	'search'	'stammer'
C1 (A′) =	f	w
V1 (A′) =	a	a
C2 (A′) =	r	k
C3 (A′) =	k	w
V2 (A′) =	a	a
C4 (A′) =	s	k

(B) CACCi verbs

(a) Imperative, imperfect and perfect stems

These behave like VCCV verbs of the type iʃri 'buy' where the final vowel is /i/. In the singular of the imperfect and of the imperative, they have the same structure as the underlying form. In the plural (of the imperfect and the imperative), that is whenever there is a suffix, the final vowel of the underlying form is lengthened, following the requirements of the phonotactics of the dialect and the rule for vowel lengthening (Rule (2), Chapter I).

In the perfect, the second vowel of the third person singular and plural is always A. Elsewhere, it is /i/. It is lengthened whenever there is a suffix, that is in the first person, second person, third person feminine and third person plural.

Let us take /sarbi/ 'wait upon' as an example.

Underlying form : sarbi

Singular	Imperative	Imperfect	Perfect
1		n sarbi	sarbi: t
2	sarbi	t sarbi	sarbi: t
3m		y sarbi	sarba

Singular	Imperative	Imperfect	Perfect
3f		t sarbi	sarba: t
Plural			
1		n sarbi: u	sarbi: na
2	sarbi: u	t sarbi: u	sarbi: tu
3		y sarbi: u	sarba: u

(b) Rules for CACCi verbs

Structure (Z) : C1 & V1 & C2 & C3 & V2, (V2 = i)

Form (A) : $\{\phi$ or W$\}$ & X & $\{\phi$ or Y$\}$

Structure (X) : = structure (Z)

except that

[P & 3] V2 = (A)

Meaning (A′) : 'wait upon'

C1 (A′) = s

V1 (A′) = a

C2 (A′) = r

C3 (A′) = b

V2 (A′) = i

B. Derived stems

1. Verbs with a geminated middle consonant

(A) (C)AC:AC verbs

As was already mentioned under CVCCVC verbs, the only differenciating feature between members of the paradigms is subject affixes. Deletion of vowels is accounted for by means of regular rules: when the suffix begins in a vowel, the final vowel of the underlying form is deleted as the result of the rule for final vowel deletion and

metathesis (Rule (1), Chapter I). There is no CVC:VCV pattern in the dialect. Moreover, the vowels are constant throughout the aspectual paradigm.

/fas:ar/ 'explain' will illustrate what has just been said.

Underlying form : fas:ar

Singular	Imperative	Imperfect	Perfect
1		n fas:ar	fas:ar t
2	fas:ar	t fas:ar	fas:ar t
3m		y fas:ar	fas:ar
3f		t fas:ar	fas:r it
Plural			
1		n fas:r u	fas:ar na
2	fas:r u	t fas:r u	fas:ar tu
3		y fas:r u	fas:r u

(B) CAC:i verbs

These verbs behave like simple verbs ending in an /i/ vowel. Except for the third person singular and plural of the perfect, they have the same structure as the underlying form, that is the second vowel is always /i/. /i/ is, of course, lengthened whenever there is a suffix.

In the third person of the singular and the plural of the perfect, the second vowel of the underlying form is changed to (A) (/ɑ/ or /a/ depending on the nature of the preceding geminated consonant: it is /ɑ/ whenever the geminated consonant is either emphatic, uvular or /r/; it is /a/ elsewhere). (A) is also lengthened before a suffix (Rule (2), Chapter I).

Two verbs will illustrate what has just been said.

Underlying forms : qor:i 'teach'

xol:i 'leave, let'

Singular	Imperative	Imperfect	Perfect
1		n qor:i	qor:i: t
		n xol:i	xol:i: t
2	qor:i	t qor:i	qor:i: t
	xol:i	t xol:i	xol:i: t
3m		y qor:i	qor:o
		y xol:i	xol:a
3f		t qor:i	qor:o: t
		t xol:i	xol:a: t
Plural			
1		n qor:i: u	qor:i: na
		n xol:i: u	xol:i: na
2	qor:i: u	t qor:i: u	qor:i: tu
	xol:i: u	t xol:i: u	xol:i : tu
3		y qor:i: u	qor:o: u
		y xol:i: u	xol:a: u

(C) Rules for verbs with a geminated middle consonant

(a) (C)AC:AC

Structure (Z) : C1 & V1 & C2 & V2 & C4, length (C2) : long

Form (A) : $\{\emptyset$ or W$\}$ & X & $\{\emptyset$ or Y$\}$

Structure (X) : = structure (Z)

Meaning (A') : 'explain'

C1 (A') = f

V1 (A′) = a

C2 (A′) = s

V2 (A′) = a

C4 (A′) = r

(b) <u>CAC:i</u>

Structure (Z) : C1 & V1 & C2 & V2, length (C2) : long, V2 = /i/

Form (A) : {ϕ or W} & X & {ϕ or Y}

Structure (X) : = structure (Z)

except that

[P & 3] V2 = (A)

Meaning (A′) : 'teach'

C1 (A′) = q

V1 (A′) = a

C2 (A′) = r

V2 (A′) = i

2. <u>(C)A:CV(C) pattern</u>

(A) <u>(C)A:CVC verbs</u>

Here again, subject affixes are the only differenciating feature between members of the paradigms. Deletion of vowels is accounted for by means of regular rules: whenever the suffix begins in a vowel, the final vowel of the underlying form is deleted in accordance with the phonotactics of the dialect (no such patterns as CV:CVCV) and the rule for final vowel deletion and metathesis (Rule (1), Chapter I) The vowels are constant throughout the aspectual paradigm.

Let us take /ʃa:rik/ 'take part' as an example.

Underlying form : ʃa:rik

Singular	Imperative	Imperfect	Perfect
1		n ʃa:rik	ʃa:rik t
2	ʃa:rik	t ʃa:rik	ʃa:rik t
3m		y ʃa:rik	ʃa:rik
3f		t ʃa:rik	ʃa:rk it
Plural			
1		n ʃa:rk u	ʃa:rik na
2	ʃa:rk u	t ʃa:rk u	ʃa:rik tu
3		y ʃa:rk u	ʃa:rk u

(B) CA:Ci verbs

As in the case of CAC:i verbs, these verbs behave like simple verbs ending in an /i/ vowel. Except for the third person singular and plural of the perfect, they have the same structure as the underlying form.

In the third person of the singular and the plural of the perfect, the final vowel of the underlying form is changed to A.

/la:qi/ 'meet' and /da:wi/ 'take medecine' will illustrate what has just been stated.

Underlying forms : la:qi
da:wi

Singular	Imperative	Imperfect	Perfect
1		n la:qi n da:wi	la:qi: t da:wi: t
2	la:qi da:wi	t la:qi t da:wi	la:qi: t da:wi: t
3m		y la:qi y da:wi	la:qa da:wa

Singular	Imperative	Imperfect	Perfect
3f		t la:qi	la:qa: t
		t da:wi	da:wa: t
plural			
1		n la:qi: u	la:qi: na
		n da:wi: u	da:wi: na
2	la:qi: u	t la:qi: u	la:qi: tu
	da:wi: u	t da:wi: u	da:wi: tu
3		y la:qi: u	la:qa: u
		y da:wi: u	da:wa: u

(C) Rules for (C)A:CV(C) verbs

(a) (C)A:CVC

Structure (Z) : C1 & V1 & C2 & V2 & C3, length (V1) : long

Form (A) : {ϕ or W} & X & {ϕ or Y}

Structure (X) : = structure (Z)

Meaning (A′) : 'take part'

C1 (A′) = ʃ

V1 (A′) = a

C2 (A′) = r

V2 (A′) = i

C3 (A′) = k

(b) CA:Ci

Structure (Z) : C1 & V1 & C2 & V2, length (V1) : long, V2 = /i/

Form (A) : {ϕ or W} & X & {φ or Y}

Structure (X) : = structure (Z)

except that

[P & 3] V2 = (A)

Meaning (A′) :	'meet'	'take medecine'
C1 (A′) =	l	d
V1 (A′) =	a	a
C2 (A′) =	q	w
V2 (A′) =	i	i

3. t-prefixed simple verbs

(A) t-prefixed VCCV(C) verbs

(a) t-prefixed VCCVC verbs

Here again, the only differenciating feature between members of the aspectual paradigm, is subject affixes. Similarly, the sole vowel of the derived verb is constant throughout the paradigm.

The reason that I do not allow for an initial vowel in these verbs and most of the verbs to be described (as most writers included in my list of references do) is two-fold: first, according to the general phonological rule for final vowel deletion and metathesis (Rule (1), Chapter I), if two vowels were allowed in such verbs, for example, as t-prefixed VCCVC verbs, the outcome of the rule would be vowel deletion and the word would be other than expected.

Example: Derived verb: *itʒrɔħ 'get wounded'

First person plural of imperfect : *n itʒrɔħ u *n itʒrħ u

In fact what occurs is not final vowel deletion but metathesis which in agreement with the general rule, allows only for one vowel ;

Example: Derived verb : tʒrɑħ 'get wounded'

First person plural of imperfect : *n tʒrɑħ u

n tʒɑrħ u [nᵊtʒárħ u] 'we get wounded'

Secondly, stress accounts for the fact that these verbs do not have an initial vowel. Indeed, *[n ítʒrɑħ] would be stressed on the first syllable, when, in fact, it is stressed on the /ɑ/ vowel, ie. [n ᵊ tʒráħ] 'I get wounded'.[1]

To return to t-prefixed VCCVC verbs, in the plural of the imperative and imperfect, and in the third person feminine and plural of the perfect, that is whenever the suffix begins in a vowel, metathesis occurs (Rule (1), Chapter I).

Example: tktib [tᵊktíb] 'be written'

Singular	Imperative	Imperfect	Perfect
1		n tktib	tktib t
2	tktib	t tktib	tktib t
3m		y tktib	tktib
3f		t tktib	tkitb it
Plural			
1		n tkitb u	tktib na
2	tkitb u	t tkitb u	tktib tu
3		y tkitb u	tkitb u

VCCVC verbs beginning in a semi-vowel, behave in the same way.

Example: twlid 'be born'

/twlid/ is pronounced [tᵘlíd] when there is no suffix or when the suffix begins in a consonant.

---

1. In some idiolects, in the imperative, a vowel precedes verbs which begin in two or more consonants. eg. itʒrɑħ 'get wounded', itʃra 'be bought', irta:ħ 'have a rest', istfa:d 'benefit' etc. This curious

Singular	Imperative	Imperfect	Perfect
1		n twlid [nᵊtᵘlíid]	twlid t [tᵘlíit:]
2	twlid [tᵘlíid]	t twlid [tᵊtᵘlíid]	twlid t [tᵘlíit:]
3m		y twlid [yᵊtᵘlíid]	twlid [tᵘlíid]
3f		t twlid [tᵊtᵘlíid]	twild it [twíild it]
Plural			
1		n twild u [nᵊtwíild u]	twlid na [tᵘlíid na]
2	twild u [twíild u]	t twild u [tᵊtwíild u]	twlid tu [tᵘlíit: u]
3		y twild u [yᵊtwíild u]	twild u [twíild u]

(b) t-prefixed VCCV verbs

In the imperfect, these verbs have the same structure as the imperative form. In the perfect they behave like the corresponding VCCV verbs (in the perfect).

/tqrɑ/ 'be read' and /tnsa/ 'be forgotten' will illustrate this.

Singular	Imperative	Imperfect
1		n tqrɑ n tnsa
2	tqrɑ tnsa	t tqrɑ t tnsa
3m		y tqrɑ y tnsa
3f		t tqrɑ t tnsa
Plural		
1		n tqrɑ: u n tnsa: u
2	tqrɑ: u tnsa: u	t tqrɑ: u t tnsa: u
3		y tqrɑ: u y tnsa: u

---

situation where two different imperative forms coexist, undoubtedly needs researching.

Singular	Perfect	
	VCCV verb	t-prefixed VCCV verb
1	qri: t nsi: t	tqri: t tnsi: t
2	qri: t nsi: t	tqri: t tnsi: t
3m	qrɑ nsa	tqrɑ tnsa
3f	qrɑ: t nsa: t	tqrɑ: t tnsa: t
Plural		
1	qri: na nsi: na	tqri: na tnsi: na
2	qri: tu nsi: tu	tqri: tu tnsi: tu
3	qrɑ: u nsa: u	tqrɑ: u tnsa: u

(B) t-prefixed $\overline{CVC}$ verbs

(a) t-prefixed CVC: verbs

In the imperfect, these verbs have the same structure as the imperative form: subject affixes are the only differenciating feature. In the perfect, they behave like the corresponding CVC: verbs (in the perfect), that is /i/ is inserted between the final consonant and a consonant-initial suffix. The following paradigms for /tlam:/ 'be gathered (together)' will illustrate what has just been said.

Singular	Imperative	Imperfect	Perfect
1		n tlam:	tlam: i: t
2	tlam:	t tlam:	tlam: i: t
3m		y tlam:	tlam:
3f		t tlam:	tlam: it

Plural	Imperative	Imperfect	Perfect
1		n tlam: u	tlam: i: na
2	tlam: u	t tlam: u	tlam: i: tu
3		y tlam: u	tlam: u

(b) t-prefixed CV:C verbs

In the imperfect, these verbs have the same structure as the imperative form. Only subject affixes differ. In the perfect, however, they behave like the corresponding CV:C verbs (in the perfect), eg./bi:ʕ/ 'sell'. /tba:ʕ/ 'be sold' will illustrate.

Singular	Imperative	Imperfect	Perfect
1		n tba:ʕ	tbiʃ t biʃ t
2	tba:ʕ	t tba:ʕ	tbiʃ t biʃ t
3m		y tba:ʕ	tba:ʕ ba:ʕ
3f		t tba:ʕ	tba:ʕ it ba:ʕ it
Plural			
1		n tba:ʕ u	tbiʃ na biʃ na
2	tba:ʕ u	t tba:ʕ u	tbiʃ tu biʃ tu
3		y tba:ʕ u	tba:ʕ u ba:ʕ u

(C) t-prefixed i:ʒa, ra, ku:l, xu:ð

(a) /i:ʒa/ 'come' cannot be prefixed with the passive morpheme /t/.

(b) /tra/ 'be seen' behaves in exactly the same way as its

corresponding active form /rɑ/. I have never heard /trɑ/ used in the perfect. However, its perfect paradigm can be imagined:

Singular	Imperative	Imperfect	Perfect
1		n rɑ n trɑ	ri: t tri: t
2	trɑ	t rɑ t trɑ	ri: t tri: t
3m		y rɑ y trɑ	rɑ trɑ
3f		t rɑ t trɑ	rɑ: t trɑ: t
Plural			
1		n rɑ: u n trɑ: u	ri: na tri: na
2	trɑ: u	t rɑ: u t trɑ: u	ri: tu tri: tu
3		y rɑ: u y trɑ: u	rɑ: u trɑ: u

In the imperative, the suppletive form is used more often:

Singular : tʃa:f

Plural : tʃa:f u

/trɑ/ is used in the imperative in such constructions as the following:

trɑ nʃu:f 'let me see'

trɑ war:i:ni 'show me'

trɑ lkta:b 'give me the book'

However, I am not certain whether /trɑ/ in these instances, is related to /trɑ/ 'be seen', or whether it is an altogether different word. /trɑ/ in this case has two allomorphs: [trɑ́]- when followed by a word, and [trɑ́h] elsewhere.

(c) /ṭ:a:kil/ 'be eaten'

For both moods, the only differenciating feature is subject affixes. The final vowel is deleted in accordance with the rule for final vowel deletion and metathesis (Rule (1), Chapter I).

Singular	Imperative	Imperfect	Perfect
1		n t:a:kil [nˀt:á:kil]	t:a:kil t [ˀt:a:kíl t]
2	t:a:kil [ˀt:á:kil]	t t:a:kil	t:a:kil t
3m		y t:a:kil	t:a:kil
3f		t t:a:kil	t:a:kl it
Plural			
1		n t:a:kl u	t:a:kil na
2	t:a:kl u	t t:a:kl u	t:a:kil tu
3		y t:a:kl u	t:a:kl u

(d) /t:a:xiɗ/ 'be taken'

This behaves morphologically in the same way as the preceding example.

Singular	Imperative	Imperfect	Perfect
1		n t:a:xiɗ [nˀt:á:xiɗ]	t:a:xiɗ t [ˀt:a:xíɗ t]
2	t:a:xiɗ [ˀt:á:xiɗ]	t t:a:xiɗ	t:a:xiɗ t
3m		y t:a:xiɗ	t:a:xiɗ
3f		t t:a:xiɗ	t:a:xɗ it
Plural			
1		n t:a:xɗ u	t:a:xiɗ na
2	t:a:xɗ u	t t:a:xɗ u	t:a:xiɗ tu
3		y t:a:xɗ u	t:a:xɗ u

I am aware of another passive form whose meaning is not closely related to that of /xu:ɗ/. The passive form in question is /t:xiɗ/ 'be done'. For both moods, the only differenciating feature is subject affixes. Metathesis is due to the rule for final vowel deletion and metathesis (Rule (1), Chapter I).

Singular	Imperative	Imperfect	Perfect
1		n t:xiɔ [nᵊt:xíɔ]	t:xiɔ t [ᵊt:xíɔ t]
2	t:xiɔ [ᵊt:xíɔ]	t t:xiɔ	t:xiɔ t
3m		y t:xiɔ	t:xiɔ
3f		t t:xiɔ	t:ixɔ it
Plural			
1		n t:ixɔ u	t:xiɔ na
2	t:ixɔ u	t t:ixɔ u	t:xiɔ tu
3		y t:ixɔ u	t:ixɔ u

(D) t-prefixed CVCCV(C) verbs

(a) t-prefixed CVCCVC verbs

These verbs behave in exactly the same way as the corresponding CVCCVC verbs in both moods.

Example: CVCCVC verb : farkas 'search'

t-prefixed CVCCVC verb : tfarkas 'be searched'

Singular	Imperative	Imperfect	Perfect
1		n farkas n tfarkas	farkas t tfarkas t
2	farkas tfarkas	t farkas t tfarkas	farkas t tfarkas t
3m		y farkas y tfarkas	farkas tfarkas
3f		t farkas t tfarkas	farks it tfarks it
Plural			
1		n farks u n tfarks u	farkas na tfarkas na
2	farks u tfarks u	t farks u t tfarks u	farkas tu tfarkas tu
3		y farks u y tfarks u	farks u tfarks u

(b) t-prefixed CACCi verbs

In the imperfect, these verbs have the same structure as the imperative form. In the perfect, they behave like the corresponding CACCi verbs (in the perfect).

Example: CACCi verb : sarbi 'wait upon'

t-prefixed CACCi verb : tsarba 'be waited upon'

Singular	Imperative	Imperfect	Perfect
1		n tsarba	tsarbi: t sarbi: t
2	tsarba	t tsarba	tsarbi: t sarbi: t
3m		y tsarba	tsarba sarba
3f		t tsarba	tsarba: t sarba: t
Plural			
1		n tsarba: u	tsarbi: na sarbi: na
2	tsarba: u	t tsarba: u	tsarbi: tu sarbi: tu
3		y tsarba: u	tsarba: u sarba: u

(E) Rules for t-prefixed simple verbs

(a) t-prefixed VCCVC verbs

Structure (Z) : C & C1 & C2 & V1 & C3, C = /t/

Form (A) : $\{\phi \text{ or } W\}$ & X & $\{\phi \text{ or } Y\}$

Structure (X) : = structure (Z)

Meaning (A′) : 'get wounded'

C (A′) = t

C1 (A′) = 3

C2 (A′) = r

V1 (A′) = *a*

C3 (A′) = h

(b) t-prefixed VCCV verbs

Structure (Z) : C & C1 & C2 & V1, V1 = (A), C = /t/

Form (A) : {∅ or W} & X & {∅ or Y}

Structure (X) : = structure (Z)

except that

[P & {1 or 2}] V1 = /i/

Meaning (A′) : 'be read'

C (A′) = t

C1 (A′) = q

C2 (A′) = r

V1 (A′) = *a*

(c) t-prefixed CVC:verbs

Structure (Z) : C & C1 & V1 & C2 , length (C2) : long, C = /t/

Form (A) : {∅ or W} & X & {∅ or Y}

Structure (X) : = structure (Z)

except that

[P & {1 or 2}] (X) = Z & V2, V2 = /i/

Meaning (A′) : 'be gathered (together)'

Meaning (A′) : 'be gathered (together)'

C (A′) = t

C1 (A′) = l

V1 (A′) = a

C2 (A′) = m

(d) t-prefixed CV:C verbs

Structure (Z) : C & C1 & V1 & C2, length (V1) : long, C = /t/

Form (A) : {∅ or W} & X & {∅ or Y}

Structure (X) : = structure (Z)

except that

[P & {1 or 2}] length (V1) : short

Meaning (A′) : 'be sold'

C (A′) = t

C1 (A′) = b

V1 (A′) = a

C2 (A′) = ʔ

(e) t-prefixed CVCCVC verbs

Structure (Z) : C & C1 & V1 & C2 & C3 & V2 & C4, C = /t/

Form (A) : {∅ or W} & X & {∅ or Y}

Structure (X) : = structure (Z)

Meaning (A′) : 'be searched'

C (A′) = t

C1 (A′) = f

V1 (A′) = a

C2 (A′) = r

C3 (A′) = k

V2 (A′) = a

C4 (A′) = s

(f) t-prefixed CACCi verbs

Structure (Z) : C & C1 & V1 & C2 & C3 & V2, V2 = (A), C = /t/

Form (A) : {∅ or W} & X & {∅ or Y}

Structure (X) : = structure (Z)

except that

[P & {1 or 2} V2 = /i/

Meaning (A′) : 'be waited upon'

C (A′) = t

C1 (A′) = s

V1 (A′) = a

C2 (A′) = r

C3 (A′) = b

V2 (A′) = a

4. t-prefixed verbs with a geminated middle consonant

(A) t-prefixed (C)AC:AC verbs

These behave in exactly the same way as the corresponding (C)AC:AC verbs (eg. /fas:ar/ 'explain')

Example: tkal:am 'talk'

Singular	Imperative	Imperfect	Perfect
1		n fas:ar n tkal:am	fas:ar t tkal:am t
2	fas:ar tkal:am	t fas:ar t tkal:am	fas:ar t tkal:am t
3m		y fas:ar y tkal:am	fas:ar tkal:am
3f		t fas:ar t tkal:am	fas:r it tkal:m it
Plural			
1		n fas:r u n tkal:m u	fas:ar na tkal:am na
2	fas:r u tkal:m u	t fas:r u t tkal:m u	fas:ar tu tkal:am tu
3		y fas:r u y tkal:m u	fas:r u tkal:m u

(B) t-prefixed CAC:i verbs

Similarly, these behave in the same way as the corresponding CAC:i verbs (as /daf:i/ 'warm'). The only difference is in the final vowel of the imperative and imperfect stems.

Example: tman:a 'wish'

Singular	Imperative	Imperfect	Perfect
1		n daf:i n tman:a	daf:i: t tman:i: t
2	daf:i tman:a	t daf:i t tman:a	daf:i: t tman:i: t
3m		y daf:i y tman:a	daf:a tman:a
3f		t daf:i t tman:a	daf:a: t tman:a: t
Plural			
1		n daf:i: u n tman:a: u	daf:i: na tman:i: na
2	daf:i: u tman:a: u	t daf:i: u t tman:a: u	daf:i: tu tman:i: tu

Plural	Imperative	Imperfect	Perfect
3		y daf:i: u y tman:a: u	daf:a: u tman:a u

/t:ak:a/ 'lean (against something)' is phonetically [ʔt:ák:a].

Singular	Imperative	Imperfect	Perfect
1		n t:ak:a	t:ak:i: t
2	t:ak:a	t t:ak:a	t:ak:i: t
3m		y t:ak:a	t:ak:a
3f		t t:ak:a	t:ak:a: t
Plural			
1		n t:ak:a: u	t:ak:i: na
2	t:ak:a: u	t t:ak:a: u	t:ak:i: tu
3		y t:ak:a: u	t:ak:a: u

(C) Rules for t-prefixed verbs with a geminated middle consonant

(a) t-prefixed (C)AC:AC verbs

Structure (Z) : C & C1 & V1 & C2 & V2 & C3, length (C2): long,

C = /t/

Form (A) : {∅ or W} & X & {∅ or Y}

Structure (X) : = structure (Z)

Meaning (A') : 'talk'

C (A') = t

C1 (A') = k

V1 (A') = a

C2 (A') = l

V2 (A') = a

C3 (A') = m

(b) t-prefixed CAC:i verbs

Structure (Z) : C & C1 & V1 & C2 & V2, length (C2) : long
V2 = A, C = /t/

Form (A) : {Φ or W} & X & {Φ or Y}

Structure (X) : = structure (Z) except that
[P & {1 or 2}] V2 = /i/

Meaning (A′) : 'wish'

C (A′) = t

C1 (A′) = m

V1 (A′) = a

C2 (A′) = n

V2 (A′) = a

5. t-prefixed (C)A:CV(C) verbs

(A) t-prefixed (C)A:CVC verbs

These behave like the corresponding (C)A:CVC verbs (eg. /ʃa:rik/ 'take part'). Example: tfa:him 'agree on'

Singular	Imperative	Imperfect	Perfect
1		n ʃa:rik n tfa:him	ʃa:rik t tfa:him t
2	ʃa:rik tfa:him	t ʃa:rik t tfa:him	ʃa:rik t tfa:him t
3m		y ʃa:rik y tfa:him	ʃa:rik tfa:him
3f		t ʃa:rik t tfa:him	ʃa:rk it tfa:hm it
Plural			
1		n ʃa:rk u n tfa:hm u	ʃa:rik na tfa:him na
2	ʃa:rk u tfa:hm u	t ʃa:rk u t tfa:hm u	ʃa:rik tu tfa:him tu
3		y ʃa:rk u y tfa:hm u	ʃa:rk u tfa:hm u

/t:a:fiq/ 'agree' is phonetically [ʔt:á:fiq].

(B) t-prefixed CA:Ci verbs

Similarly, these behave like the corresponding CA:Ci verbs (eg. /da:wi/ 'take medecine'). The only difference is in the final vowel of the imperative and imperfect stems.

Example: tla:qə 'meet' (intr.)

Singular	Imperative	Imperfect	Perfect
1		n da:wi n tla:qa	da:wi: t tla:qi: t
2	da:wi tla:qa	t da:wi t tla:qa	da:wi: t tla:qi: t
3m		y da:wi y tla:qa	da:wa tla:qa
3f		t da:wi t tla:qa	da:wa: t tla:qa: t
Plural			
1		n da:wi: u n tla:qa: u	da:wi: na tla:qi: na
2	da:wi: u tla:qa: u	t da:wi: u t tla:qa: u	da:wi: tu tla:qi: tu
3		y da:wi: u y tla:qa: u	da:wa: u tla:qa: u

(C) Rules for t-prefixed (C)A:CV(C) verbs

(a) t-prefixed (C)A:CVC verbs

Structure (Z) : C & C1 & V1 & C2 & V2 & C3, length (V1) : long,

C = /t/

Form (A) : $\{\phi \text{ or } W\}$ & X & $\{\phi \text{ or } Y\}$

Structure (X) : = structure (Z)

Meaning (A′) : 'agree on'

C (A′) = t

C1 (A′) = f

V1 (A′) = a

C2 (A′) = h

V2 (A′) = i

C3 (A′) = m

(b) t-prefixed CA:Ci verbs

Structure (Z) : C & C1 & V1 & C2 & V2, length (V1) : long, V2=(A),
C = /t/

Form (A) : {ϕ or W} & X & {ϕ or Y}

Structure (X) : = structure (Z)

except that

[P & {1 or 2}] V2 = /i/

Meaning (A′) : 'meet'

C (A′) = t

C1 (A′) = l

V1 (A′) = a

C2 (A′) = q

V2 (A′) = ɑ

6. t-infixed verbs

(A) Imperative, imperfect and perfect stems

(a) CtCAC verbs

These behave in exactly the same way as t-prefixed VCCVC verbs (eg. /tʒraħ/ 'get wounded'). The infixed /t/ has the same behaviour as the first radical consonant of a t-prefixed VCCVC verb.

Example: xtraʕ 'invent'

Underlying form : xtraʕ

Singular	Imperative	Imperfect	Perfect
1		n tʒraħ n xtraʕ	tʒraħ t xtraʕ t
2	tʒraħ xtraʕ	t tʒraħ t xtraʕ	tʒraħ t xtraʕ t
3m		y tʒraħ y xtraʕ	tʒraħ xtraʕ
3f		t tʒraħ t xtraʕ	tʒarħ it xtarʕ it

Plural	Imperative	Imperfect	Perfect
1		n tʒarħ u n xtarʕ u	tʒraħ na xtraʕ na
2	tʒarħ u xtarʕ u	t tʒarħ u t xtarʕ u	tʒraħ tu xtraʕ tu
3		y tʒarħ u y xtarʕ u	tʒarħ u xtarʕ u

(b) CtA:C verbs

These behave like t-prefixed CV:C verbs (eg. /tʃa:f/ 'be seen'). In the first and second persons of the perfect, that is whenever the suffix begins in a consonant, the vowel is either /i/ or /ɑ/ depending on the quality of the vowel of the underlying form: it is /i/ if the vowel of the underlying form is /a:/; /ɑ/ if the vowel of the underlying form is /ɑ:/.

Example: Underlying forms : ħta:ʒ 'need'

xtɑ:r 'choose'

Singular	Imperative	Imperfect	Perfect
1		n ħta:ʒ n xtɑ:r	ħtiʒ t xtɑr t
2	ħta:ʒ xtɑ:r	t ħta:ʒ t xtɑ:r	ħtiʒ t xtɑr t
3m		y ħta:ʒ y xtɑ:r	ħta:ʒ xtɑ:r
3f		t ħta:ʒ t xtɑ:r	ħta:ʒ it xtɑ:r it
Plural			
1		n ħta:ʒ u n xtɑ:r u	ħtiʒ na xtɑr na
2	ħta:ʒ u xtɑ:r u	t ħta:ʒ u t xtɑ:r u	ħtiʒ tu xtɑr tu
3		y ħta:ʒ u y xtɑ:r u	ħta:ʒ u xtɑ:r u

(c) CtaC: verbs

These behave like CVC: verbs (eg. /ɦil:/ 'open').

Example: Underlying form : ɦtal: 'conquer'

Singular	Imperative	Imperfect	Perfect
1		n ɦil: n ɦtal:	ɦal: i: t ɦtal: i: t
2	ɦil: ɦtal:	t ɦil: t ɦtal:	ɦal: i: t ɦtal: i: t
3m		y ɦil: y ɦtal:	ɦal: ɦtal:
3f		t ɦil: t ɦtal:	ɦal: it ɦtal: it
Plural			
1		n ɦil: u n ɦtal: u	ɦal: i: na ɦtal: i: na
2	ɦil: u ɦtal: u	t ɦil: u t ɦtal: u	ɦal: i: **tu** ɦtal: i: tu
3		y ɦil: u y ɦtal: u	ɦal: u ɦtal: u

(d) iCtCi verbs

These behave like VCCV verbs (eg. /iʃri/ 'buy').

Example: Underlying form : iʃthi 'fancy'

Singular	Imperative	Imperfect	Perfect
1		n iʃri n iʃthi	ʃri: t ʃthi: t
2	iʃri iʃthi	t iʃri t iʃthi	ʃri: t ʃthi: t
3m		y iʃri y iʃthi	**ʃra** ʃtha
3f		t iʃri t iʃthi	ʃra: t ʃtha: t
Plural			
1		n iʃri: u n iʃthi: u	ʃri: na ʃthi: na
2	iʃri: u iʃthi: u	t iʃri: u t iʃthi: u	ʃri: tu ʃthi: tu

Plural	Imperative	Imperfect	Perfect
3		y iʃri: u y iʃthi: u	ʃra: u ʃtha: u

(B) Rules for t-infixed verbs

(a) CtCAC verbs

Structure (Z) : C1 & C & C2 & V1 & C3, C = /t/

Form (A) : $\{\phi$ or W$\}$ & X & $\{\phi$ or Y$\}$

Structure (X) : = structure (Z)

Meaning (A′) : 'invent'

C1 (A′) = x

C (A′) = t

C2 (A′) = r

V1 (A′) = a

C3 (A′) = ʕ

(b) CtA:C verbs

Structure (Z) : C1 & C & V1 & C2, length (V1) : long, C = /t/

Form (A) : $\{\phi$ or W$\}$ & X & $\{\phi$ or Y$\}$

Structure (X) : = structure (Z)

except that

[p & {1 or 2}] length (V1) : short

Meaning (A′) : 'need'

C1 (A′) = ħ

C (A′) = t

V1 (A′) = a

C2 (A′) = ʒ

(c) <u>CtaC:verbs</u>

Structure (Z) : C1 & C & V1 & C2, length (C2) : long, C = /t/

Form (A) : {ϕ or W} & X & {ϕ or Y}

Structure (X) : = structure (Z)

except that

[P & {1 or 2} structure (X) = Z & V2, V2 = /i/

Meaning (A′) : 'conquer'

C1 (A′) = h

C (A′) = t

V1 (A′) = a

C2 (A′) = l

(d) <u>iCtCi verbs</u>

Structure (Z) : V1 & C1 & C & C2 & V2, C= /t/, V2 = /i/

Form (A) : {ϕ or W} & X & {ϕ or Y}

Structure (X) : = structure (Z)

except that

[P] V1 : ϕ

[P & 3] V2 = (A)

Meaning (A′) : 'fancy'

V1 (A′) = i

C1 (A') = ʃ

C (A') = t

C2 (A') = h

V2 (A') = i

7. st-prefixed verbs

(A) Imperative, imperfect and perfect stems

(a) stACCAC and sta:CiC verbs

These behave like CVCCVC verbs (eg. /farkas/ 'search').

Example: Underlying forms : staʃmar 'colonise'

sta:nis 'get used to'

Singular	Imperative	Imperfect	Perfect
1		n farkas	farkas t
		n staʃmar	staʃmar t
		n sta:nis	sta:nis t
2	farkas	t farkas	farkas t
	staʃmar	t staʃmar	staʃmar t
	sta:nis	t sta:nis	sta:nis t
3m		y farkas	farkas
		y staʃmar	staʃmar
		y sta:nis	sta:nis
3f		t farkas	farks it
		t staʃmar	staʃmr it
		t sta:nis	sta:ns it
Plural			
1		n farks u	farkas na
		n staʃmr u	staʃmar na
		n sta:ns u	sta:nis na
2	farks u	t farks u	farkas tu
	staʃmr u	t staʃmr u	staʃmar tu
	sta:ns u.	t sta:ns u	sta:nis tu
3		y farks u	farks u
		y staʃmr u	staʃmr u
		y sta:ns u	sta:ns u

(b) stACCA and staC:a verbs

These behave like VCCV verbs (eg. /ɑqrɑ/ 'read').

Example: Underlying forms : stabna 'adopt'

stan:a 'wait'

Singular	Imperative	Imperfect	Perfect
1		n ɑqrɑ	qri: t
		n stabna	stabni: t
		n stan:a	stan:i: t
2	ɑqrɑ	t ɑqrɑ	qri: t
	stabna	t stabna	stabni: t
	stan:a	t stan:a	stan:i: t
3m		y ɑqrɑ	qrɑ
		y stabna	stabna
		y stan:a	stan:a
3f		t ɑqrɑ	qrɑ: t
		t stabna	stabna: t
		t stan:a	stan:a: t
Plural			
1		n ɑqrɑ: u	qri: na
		n stabna: u	stabni: na
		n stan:a: u	stan:i: na
2	ɑqrɑ: u	t ɑqrɑ: u	qri: tu
	stabna: u	t stabna: u	stabni: tu
	stan:a: u	t stan:a: u	stan:i: tu
3		y ɑqrɑ: u	qrɑ: u
		y stabna: u	stabna: u
		y stan:a: u	stan:a: u

(c) stCɑC: verbs

These behave like CVC: verbs (eg. /bil:/ 'wet')

Example: Underlying form : stɦɑq: 'deserve'

Singular	Imperative	Imperfect	Perfect
1		n bil:	bal: i: t
		n stɦɑq:	stɦɑq: i: t
2	bil:	t bil:	bal: i: t
	stɦɑq:	t stɦɑq:	stɦɑq: i: t
3m		y bil:	bal:
		y stɦɑq:	stɦɑq:

Singular	Imperative	Imperfect	Perfect
3f		t bil: t stħaq:	bal: it stħaq: it
Plural			
1		n bil: u n stħaq: u	bal: i: na stħaq: i: na
2	bil: u stħaq: u	t bil: u t stħaq: u	bal: i: tu stħaq: i: tu
3		y bil: u y stħaq: u	bal: u stħaq: u

(d) stCa:C verb

This behaves like CV:C verbs (eg. /ba:t/ 'stay for the night').

Underlying form : stfa:d 'benefit'

Singular	Imperative	Imperfect	Perfect
1		n ba:t n stfa:d	bit t stfid t
2	ba:t stfa:d	t ba:t t stfa:d	bit t stfid t
3m		y ba:t y stfa:d	ba:t stfa:d
3f		t ba:t t stfa:d	ba:t it stfa:d it
Plural			
1		n ba:t u n stfa:d u	bit na stfid na
2	ba:t u stfa:d u	t ba:t u t stfa:d u	bit tu stfid tu
3		y ba:t u y stfa:d u	ba:t u stfa:d u

(B) Rules for st-prefixed verbs

(a) stACCAC and sta:CiC verbs

Structure (Z) : CO & C & V1 & C1 & C2 & V2 & C3, CO = /s/, C = /t/

: CO & C & V1 & C1 & V2 & C2, length (V1) : long,

CO = /s/, C = /t/

Form (A) : {ϕ or W} & X & {ϕ or Y}

Structure (X) : = structure (Z)

Meaning (A′) : 'colonise'		Meaning (A′) : 'get used to'	
CO (A′) =	s	CO (A′) =	s
C (A′) =	t	C (A′) =	t
V1 (A′) =	o	V1 (A′) =	a
C1 (A′) =	ɕ	C1 (A′) =	n
C2 (A′) =	m	V2 (A′) =	i
V2 (A′) =	ɑ	C2 (A′) =	s
C3 (A′) =	r		

(b) stACCA and staC:a verbs

Structure (Z) : CO & C & V1 & C1 & C2 & V2, V2 = (A), CO = /s/

C = /t/

: CO & C & V1 & C1 & V2, length (C1) : long, V2 : /a/,

CO = /s/, C = /t/

Form (A) : {ϕ or W} & X & {ϕ or Y}

Structure (X) : = structure (Z)

except that

[p & {1 or 2}] V2 = /i/

Meaning (A′) : 'adopt'		Meaning (A′) : 'wait'	
CO (A′) =	s	CO (A′) =	s
C (A′) =	t	C (A′) =	t
V1 (A′) =	a	V1 (A′) =	a
C1 (A′) =	b	C1 (A′) =	n
C2 (A′) =	n	V2 (A′) =	a
V2 (A′) =	a		

(c) stCoC: verbs

Structure (Z) : CO & C & C1 & V1 & C2, length (C2) : long,

CO = /s/, C = /t/

Form (A) : {φ or W} & X & {φ or Y}

Structure (X) : = structure (Z)

except that

[P & {1 or 2} X = Z & V2, V2 = /i/

Meaning (A′) : 'need'

CO (A′) = s

C (A′) = t

C1 (A′) = ɦ

V1 (A′) = ɑ

C2 (A′) = q

(d) stCa:C verbs

Structure (Z) : CO & C & C1 & V1 & C2, length (V1) : long, CO = /s/,

C = /t/

Form (A) : {φ or W} & X & {φ or Y}

Structure (X) : = structure (Z)

except that

[P & {1 or 2} length V1 : short

Meaning (A′) : 'benefit'

CO (A′) = s

C (A′) = t

C1 (A′) = f

V1 (A′) = a

C2 (A′) = d

8. CCA:C verbs

(A) Imperative, imperfect and perfect stems

In the imperative and imperfect, these verbs have the same structure as the underlying forms.

In the first and second persons of the perfect, that is whenever the suffix begins in a consonant, the radical vowel is shortened and is either /u/ or /i/ depending on the vowel of the underlying form: it is /u/ when the underlying form has /ɑ:/, /i/ when it has /a:/. There is, however, at least one exception to this rule: /kbo:r/ 'become big, old' is not */kburt/ in the first person singular of the perfect, for example, but /kbirt/ 'I became big, old'. This may be because /kbɑ:r/ is in free variation with /ikbir/ (see Section IV E above), which corresponds to perfect first person singular /kbirt/.

Example: Underlying forms : ħmɑ:r 'become red'

kħa:l 'become black'

Singular	Imperative	Imperfect	Perfect
1		n ħmɑ:r n kħa:l	ħmur t kħil t
2	ħmɑ:r kħa:l	t ħmɑ:r t kħa:l	ħmur t kħil t
3m		y ħmɑ:r y kħa:l	ħmɑ:r kħa:l
3f		t ħmɑ:r t kħa:l	ħmɑ:r it kħa:l it
Plural			
1		n ħmɑ:r u n kħa:l u	ħmur na kħil na
2	ħmɑ:r u kħa:l u	t ħmɑ:r u t kħa:l u	ħmur tu kħil tu

Plural	Imperative	Imperfect	Perfect
3		y ɦmɑ:r u y kɦa:l u	ɦmɑ:r u kɦa:l u

(B) Rules for CCA:C verbs

Structure (Z) : C1 & C2 & V1 & C3, length (V1) : long

Form (A) : {Φ or W} & X & {Φ or Y}

Structure (X) : = structure (Z)

except that

[P & {1 or 2} length V1 : short

Meaning (A′) :	'become red'	'become black'
C1 (A′) =	ɦ	k
C2 (A′) =	m	ɦ
V1 (A′) =	ɑ	a
C3 (A′) =	r	l

C. Loan verbs

In this section I shall discuss a few loan verbs (most of which were borrowed from French), and describe the way they fit into the dialect. I shall divide them into two categories: verbs ending in a consonant and verbs ending in a vowel.

1. Verbs ending in a consonant

(a) CVCCVC verbs

These have the same structure as CVCCVC non-loan verbs (eg. /farkas/ 'search' or /duwliʃ/ 'go for a walk').

Examples: talfan 'phone'

riygil 'fix'

ruwfiz 'refuse'

duwbil 'fail (an exam)'

Accordingly, they behave in exactly the same way as CVCCVC verbs in the imperative, imperfect and perfect.

Singular	Imperative	Imperfect	Perfect
1		n talfan	talfan t
		n ruwfiz	ruwfiz t
2	talfan	t talfan [ʔt:ˈalfan]	talfan t
	ruwfiz	t ruwfiz	ruwfiz t
3m		y talfan	talfan
		y ruwfiz	ruwfiz
3f		t talfan	talfn it
		t ruwfiz	ruwfz it
Plural			
1		n talfn u	talfan na
		n ruwfz u	ruwfiz na
2	talfn u	t talfn u	talfan tu
	ruwfz u	t ruwfz u	ruwfiz tu
3		y talfn u	talfn u
		y ruwfz u	ruwfz u

(b) t-prefixed CVCCVC verbs

As in the case of CVCCVC verbs, CVCCVC loan verbs, when relevant (ie. if they are transitive), can become passive by the prefixation of /t/.

Examples: triygil 'be fixed'

truwfiz 'be refused'

/triybil/ 'dribble', although it does not have a passive meaning, is conjugated in the same way as t-prefixed CVCCVC verbs.

Singular	Imperative	Imperfect	Perfect
1		n triybil	triybil t
2	triybil	t triybil	triybil t
3m		y triybil	triybil
3f		t triybil	triybl it

Plural	Imperative	Imperfect	Perfect
1		n triybl u	triybil na
2	triybl u	t triybl u	triybil tu
3		y triybl u	triybl u

2. Verbs ending in a vowel

(a) CACCi verbs

Similarly, these behave like CACCi non-loan verbs (eg. /maʕwi/ 'miaow').

Examples: sarbi 'wait upon'

marki 'score'

Singular	Imperative	Imperfect	Perfect
1		n maʕwi n sarbi	maʕwi: t sarbi: t
2	maʕwi sarbi	t maʕwi t sarbi	maʕwi: t sarbi: t
3m		y maʕwi y sarbi	maʕwa sarba
3f		t maʕwi t sarbi	maʕwa: t sarba: t
Plural			
1		n maʕwi: u n sarbi: u	maʕwi: na sarbi: na
2	maʕwi: u sarbi: u	t maʕwi: u t sarbi: u	maʕwi: tu sarbi: tu
3		y maʕwi: u y sarbi: u	maʕwa: u sarba: u

(b) t-prefixed CACCi verbs

CACCi loan verbs can also be passivised (when relevant) by the prefixation of /t/.

Examples: tsarba 'be waited upon'

tmarka 'be scored'

/tplanʒa/ 'dive' (from French 'plonger') has a reflexive meaning in

the dialect, hence the /t/ prefix. It is conjugated in the same way as t-prefixed CACCi verbs (eg. /tsarba/).

Singular	Imperative	Imperfect	Perfect
1		n tsarba n tplanza	tsarbi: t tplanzi:t
2	tsarba tplanza	t tsarba t tplanza	tsarbi: t tplanzi: t
3m		y tsarba y tplanza	tsarba tplanza
3f		t tsarba t tplanza	tsarba: t tplanza: t
Plural			
1		n tsarba: u n tplanza: u	tsarbi: na tplanzi: na
2	tsarba: u tplanza: u	t tsarba: u t tplanza: u	tsarbi: tu tplanzi: tu
3		y tsarba: u y tplanza: u	tsarba: u tplanza: u

(c) CA:Ci verb

The only loan verb with this pattern, /ra:ni/ 'train'(tr.), has the same structure as CA:Ci non-loan verbs (eg. /la:qi/ 'meet',tr.), and accordingly, behaves in a similar way.

Singular	Imperative	Imperfect	Perfect
1		n la:qi n ra:ni	la:qi: t ra:ni: t
2	la:qi ra:ni	t la:qi t ra:ni	la:qi: t ra:ni: t
3m		y la:qi y ra:ni	la:qa ra:na
3f		t la:qi t ra:ni	la:qa: t ra:na: t
Plural			
1		n la:qi: u n ra:ni: u	la:qi: na ra:ni: na
2	la:qi: u ra:ni: u	t la:qi: u t ra:ni: u	la:qi tu ra:ni: tu
3		y la:qi: u y ra:ni: u	la:qo: u ra:na: u

(d) t-prefixed CA:Ci verb

The prefixation of /t/ to /ra:ni/ makes it intransitive (ie. tra:na 'train', intr.). /tra:na/ is conjugated in the same way as t-prefixed CA:Ci non-loan verbs (eg. /tla:qa/ 'meet', intr.).

3. Conclusion

Loan verbs are made to fit into existing patterns. Like non-loan verbs, they are inflected for person, number and gender. Also, like non-loan verbs, they may be the source of certain derivations (see t-prefixed loan verbs above). A separate thesis will, no doubt, be needed for the description and analysis of loan verbs in particular, and loan words in general.

D. General rules for the verb

In this section, I shall try and group together all that has been said about the verb in the Arabic dialect of Tunis, in the form of general rules.

1. Generalizations

(A) I shall start by reiterating two important phonological rules which were introduced in Chapter I:

Rule (1) : If a vowel-initial suffix is added after a (C)VC sequence, the vowel in (C)VC is deleted if the stem contains more than one vowel; it is however metathesized if the stem contains only one vowel.

Rule (2) : If a stem ends in a vowel, this vowel is lengthened before a suffix.

(B) If the underlying form starts in a vowel, that particular vowel is deleted in the perfect.

Examples: Underlying forms Perfect

Underlying forms		Perfect	
iktib	'write'	ktib	'he wrote'
ɑqrɑ	'read'	qri: na	'we read'
iʃthi	'fancy'	ʃtha: u	'they fancied'

(C) (a) The radical vowel of the perfect is (A), if the final consonant of the underlying (imperative) form is geminated.

Examples: Underlying forms		Perfect	
ħib:	'like'	ħab:	'he liked'
sub:	'pour'	sɑb: u	'they poured'

(b) The final vowel of the third person of the perfect is similarly (A), if the final vowel of the underlying (imperative) form is long.

Examples: Underlying forms		Perfect (Third person)	
ʃu:f	'see'	ʃa:f it	'she saw'
ħmo:r	'become red'	ħmɑ:r u	'they became red'

(c) The final vowel of the third person of the perfect is again (A), if the underlying (imperative) form ends in a vowel.

Examples: Underlying forms		Perfect (Third person)	
iʃri	'buy'	ʃra	'he bought'
xɑl:i	'let, leave'	xɑl:a: u	'they let, left'
la:qi	'meet'	la:qɑ: t	'she met'

(D) In the first and second persons of the perfect, that is whenever the suffix begins in a consonant, an /i/ vowel is added to the perfect stem, if the final consonant of the underlying (imperative) form is geminated. (This is needed for phonotactic reasons).

Examples: Underlying forms		1 and 2 persons perfect	
bil:	'wet'	bal: i: t	'I wet'
ħtal:	'conquer'	ħtal: i: na	'we conquered'
sthɑɑ:	'need, deserve'	sthɑɑ: i: tu	'you (pl)needed'

(E) Under the same circumstances, a long underlying final vowel is shortened.

Examples:	Underlying forms		1 and 2 persons perfect	
	ʃu:f	'see'	ʃuf t	'I saw'
	ħta:ʒ	'need'	ħtiʒ t	'you (sing.) needed'
	ħmo:r	'become red'	ħmur na	'we became red'

(F) Again under the same conditions, if the underlying (imperative) form ends in a vowel, this vowel is always replaced by /i/.

Examples:	Underlying forms		1 and 2 persons perfect	
	ɑqrɑ	'read'	qri: t	'I read'
	tman:a	'wish'	tman:i: na	'we wished'
	stadʕa	'invite '	stadʕi: tu	'you (pl.) invited'

(G) As the reader must have noticed, the verb stem cannot have more than two vowels, one of which may be long.

2. Explanation of the notation

For the sake of generalizing, I shall use an abstract phonological structure of verb stems (Table XIII). Five headings are needed. They are labelled respectively: Vin, Cin, Cm, Vf, Cf (V: vowel; C: consonant; in: initial; f: final).

Two other symbols are needed: In (initial) and F (final). 'In:V' would mean that "the initial radical of the underlying (imperative) form is a vowel'. Similarly, 'F:C' would mean that "the final radical of the underlying (imperative) form is a consonant".

This abstract structure, moreover, would treat long vowels and long consonants (geminated) as single vowels and consonants, that is a long vowel or a long consonant is put in one column only and not two.

Length, therefore, is specified elsewhere:

Example: 'Length (V_F): long' would mean that "the final vowel under V_F is long". If unspecified, a vowel or consonant would always be short.

Table XIII

Vin	Cin	Vin	Cm	Vf	Cf
i	k		t	i	b
i	b		k	i	
	ɦ			i	b:
	d			u:	r
	f	a	r k	a	s
	s	a	r b	i	
	ʃ	a	s:	a	r
	b	a	r:	i	
	ʃ	a:	r	i	k
	l	a:	q	i	
	t ʒ		r	q	h
	t q		r	q	
	t b			a	l:
	t b			a:	ʕ
	t f	a	r k	a	s
	t s	a	r b	a	
	t n	ɑ	k:	ɑ	r
	t m	a	n:	a	
	t ʃ	a:	r	i	k
	t l	a:	q	ɑ	
	t l	a:	q	ɑ	
	ɣ t		n	a	m
	ɦ t			a:	ʒ
	ɦ t			a	l:
	ʃ t		h	i	
i	s t	a	ʕ m	a	l
	s t	a	b n	a	
	s t		ɦ	ɑ	q:
	s t		f	a:	d
	s t	a:	n	i	s
	ɦ m			o:	r

3. Rules for the verb

(A) The two rules (for final vowel deletion and metathesis, and for vowel lengthening) are not formulated here, because they are general phonological rules that apply to the word in general.

(B) Rule (4) : [if P & In (Z) : Vin] Vin (X) : ∅

(C) Rule (5) : [if {P & length Cf (Z) : long} or {P & 3 & length Vf (Z) : long} or {P & 3 & F (Z) : Vf}] Vf (X) = A

(D) Rule (6) : [if P & {1 or 2} & length Cf(Z) : long] X = Z & V, V=i

(E) Rule (7) : [if P & {1 or 2} & length Vf(Z) : long] length Vf(X): short

(F) Rule (8) : [if P & {1 or 2} & F(Z) : Vf] Vf(X) = i

VI. PARTICIPLES

The participle in Arabic has, as far as I know, always been analysed from the point of view of 'activeness' versus 'passiveness'. I shall adopt the same analysis for the dialect of Tunis.

Generally, transitive verbs have both active and passive participles, while intransitive verbs have active participles only.

Examples: Underlying forms		Active participles	Passive participles
uqtul	'kill', tr.	qo:til	maqtu:l
mis:	'touch', tr.	ma:sis	mamsu:s
aʕṭos	'sneeze', intr.	ʕo:ṭis	
iʒri	'run', intr.	ʒa:ri	

Derived verbs and some simple verbs (see below) have a unique form for both active and passive participles: generally, when the underlying form or the finite (when relevant) is transitive, the unique

participle is both active and passive; when it is not, the participle takes the voice of the underlying form or the finite.

Examples:

tor$\int$aq	'explode', tr.	mtor$\int$aq	(active or passive)
ςa:qib	'punish', tr.	mςa:qib	(active or passive)
txob:a	'hide yourself', intr.	mtxub:i	(active only)
byo:∂	'become white', intr.	mbyo:∂	(active only)

I shall now consider the participles of each type of verb separately. I shall start, however, by introducing a rule for vowel alternation which applies to certain verbs ending in a vowel: such verbs must either start in a vowel, like /i$\int$ri/ 'buy', or have a geminated middle consonant, like /xob:i/ 'hide', or have an st-prefix, like /stadςa/ 'invite':

Rule (9) : (a) The first vowel of the participle (either passive or unique) is /i/ if the underlying form starts with /i/.

Examples:	i$\int$ri	'buy'	mi$\int$ri
	i$\int$thi	'fancy'	mi$\int$thi

(b) It is /i/ if the underlying form starts with /a/.

Examples:	a$\hbar\int$i	'stuff'	mi$\hbar\int$i
	daf:i	'warm'	mdif:i
	stadςa	'invite'	mstidςi

(c) It is /u/ if the underlying form starts with /o/.

Examples:	oqli	'fry'	muqli
	txob:a	'hide yourself'	mtxub:i

There are, however, a few exceptions:

- /sto$\eth$na/ 'become rich' is not */mstuðni/ but /msti$\eth$ni/.
- /qor:i/ 'teach' remains unchanged, ie. /mqor:i/.
- There is no vowel alternation when the geminated middle consonant

is a semi-vowel.

Examples: qɑw:i 'cause to become strong' mqɑw:i

ɗ̣ɑw:i 'light up' mɗ̣ɑw:i

(d) It is /u/ if the underlying form starts with /u/.

Example: uwfa 'finish' muwfi

1. Form of the participle

A. Participles of simple stems

(1) Participles of VCCV(C) verbs

(a) Participles of VCCVC verbs

As stated above, the general rule is that transitive verbs have both active and passive participles, while intransitive verbs have active participles only.

Examples:

Underlying forms		Active Participles	Passive Participles
iktib	'write', tr.	ka:tib	maktu:b
iħsib	'count', tr.	ħa:sib	maħsu:b
ɑhbɑṭ	'get down', intr.	hɑ:biṭ	
uxruʒ	'go out', intr.	xɑ:riʒ	

Some intransitive verbs, however, do have passive participles.

Examples:

Underlying forms		Active Participles	Passive Participles
uskun	'inhabit'	sa:kin	masku:n
ihbil	'be crazy'	ha:bil	mahbu:l

This may be because they have acquired an adjectival status.

Verbs such as /uwlid/, /uwqif/, /iybis/ inflect in the same way:

uwlid	'give birth to', tr.	wa:lid	maʊlu:d
uwqif	'stand up', intr.	wa:qif	

iybis 'harden', intr. ya:bis

(b) Participles of VCCV verbs

Similarly, transitive VCCV verbs have both active and passive participles. Intransitive verbs have active participles only.

Examples:

Underlying forms		Active Participles	Passive Participles
iʃri	'buy', tr.	ʃa:ri	miʃri
aɦʃi	'stuff', tr.	ɦa:ʃi	miɦʃi
oqli	'fry', tr.	qo:li	muqli
uwfa	'finish', tr.	wa:fi	muwfi
imʃi	'go, walk', intr.	ma:ʃi	
itṛo	'be soft', intr.	tṛa:ri	

/itfi/ 'switch off' (a transitive verb) has a unique form for both active and passive participles: tṛa:fi (active or passive).

The participle of /aʕya/ 'get tired' is /ʕa:yi/ which is pronounced [ʕá:y].

(2) Participles of $C\overline{VC}$ verbs

(a) Participles of CVC: verbs

Here again, only transitive verbs may have both active and passive participles.

Examples:

Underlying forms		Active Participles	Passive Participles
ʃid:	'catch', tr.	ʃa:did	maʃdu:d
ɦib:	'like, love', tr.	ɦa:bib	maɦbu:b
kuɦ:	'cough', intr.	ka:ɦiɦ	
ʕis:	'guard', intr.	ʕa:sis	

/ʃa:did/, /ɦa:bib/ etc. are in free variation with /ʃa:d:/, /ɦa:b:/ etc.

Some transitive verbs, however, do not have passive participles.

Examples: ʕiz: 'be fond of' ʕa:ziz

dug: 'prick' da:gig

Some **intr**ansitive verbs, on the other hand, have passive participles.

Example: ʃuk: 'doubt' ʃa:kik (active) maʃku:k (passive)

(b) Participles of CV:C verbs

Usually, neither transitive nor intransitive CV:C verbs have passive participles.

Examples: zi:d 'add', tr. za:yid (active)

ʒi:b 'bring', tr. ʒa:yib (active)

ʕu:m 'swim', intr. ʕa:yim (active)

hi:ʒ 'be rough' (of sea), intr. ha:yiʒ (active)

A few transitive verbs do, however, have a passive participle.

Examples: bi:ʕ 'sell' ba:yiʕ (active) mabyu:ʕ (passive)

ɦu:f 'steal' ɦa:yif (active) maɦyu:f (passive)

(3) Participles of ku:l, xu:ð, i:ʒa, rɑ.

(a) Participles of ku:l and xu:ð

/ku:l/ and /xu:ð/ have active and passive participles:

ku:l 'eat', tr. wa:kil (active) mt:a:kil (passive)

xu:ð 'take', tr. wa:xið (active) mt:a:xið (passive)

As will be shown later, /mt:a:kil/ and /mt:a:xið/ are also the unique participles of /t:a:kil/ and /t:a:xið/ respectively. /wa:kil/ and /wa:xið/ are in free variation with /ma:kil/ and /ma:xið/ respectively. /wa:xið/ or /ma:xið/, furthermore, is in free variation with /wa:xu/ or /ma:xu/

— —

(b) Participle of i:ʒa

This does not have a passive participle.

i:ʒa 'come', intr. ʒa:yi (active)

/ʒa:yi / is pronounced [ʒá:y].

(c) Participle of rɑ

This has an active participle which is suppletive.

rɑ 'see', tr. ʃa:yif (active)

(4) Participles of CVCCV(C) verbs

From this type on, there is no morphological distinction between active and passive participles of the same verb. There is, then, no need to discuss 'activeness' and 'passiveness' of the participle here.

Furthermore, the participle has, generally, the same structure as the underlying form or the finite, except for the prefixation of /m/. Vowel differences such as /ðɑl:i/ /mðul:i/ are accounted for by means of regular rules (Rule (9), Chapter III). The final vowel of participles ending in a vowel, is always /i/.

(a) Participles of CVCCVC verbs:

farkas	'search', tr.	mfarkas (participle)
ðɑrbal	'sieve', tr.	mðɑrbal (participle)
dɑqdɑq	'knock', intr.	mdɑqdɑq (participle)
zɑqzɑq	'sing' (of birds), intr.	mzɑqzɑq (participle)

(b) Participles of CACCi verbs :

sarbi	'wait upon', tr.	msarbi (participle)
maʕwi	'miaow', intr.	m:aʕwi (participle)

/m:aʕwi/ is phonetically [ˀm:áʕwi].

B. Participles of derived stems

(a) Participles of verbs with a geminated middle consonant

These are formed by the prefixation of /m/ to the underlying form. Vowel alternations are predictable (Rule (9)).

Examples:

		Participle
ʕal:aq	'hang', tr.	mʕal:aq
qaʕ:ad	'cause to sit', tr.	mqaʕ:ad
ʕay:aṭ	'shout', intr.	mʕay:aṭ
ṣaf:aq	'clap', intr.	mṣaf:aq
tak:i	'lean', tr.	mtik:i
ɣal:i	'boil', tr.	mɣul:i
wal:i	'become', intr.	mwil:i

(b) Participles of (C)A:CV(C) verbs

These are formed in the same way.

Examples:

		Participle
sa:maħ	'forgive', tr.	msa:maħ
ʕa:qib	'punish', tr.	mʕa:qib
ra:ni	'train', tr.	mra:ni
ħa:yil	'cheat', intr.	mħa:yil

(c) Participles of t-prefixed verbs

t-prefixed verbs, being either passive, reflexive or intransitive, have a unique participle which has the voice of the finite. Furthermore, they may or may not have /t/ in their participles. Indeed, the passive participles of the corresponding non-prefixed forms may be used.

Examples:

Examples:

farkas	'search'	mfarkas
tfarkas	'be searched'	mtfarkas or mfarkas
ðot:i	'cover'	mðut:i
tðat:a	'cover yourself'	mtðut:i or mðut:i

If the relationship between a t-prefixed verb and its corresponding non-prefixed verb is that of a transitive-intransitive type, the participle of the t-prefixed verb keeps its /t/ in order to be distinguished from the participle of the corresponding transitive verb .

Examples:

kal:am	'talk', tr.	mkal:am
tkal:am	'talk', intr.	mtkal:am, not *mkal:am
ħad:aθ	'tell, tr.	mħad:aθ
tħad:aθ	'tell, intr.	mtħad:aθ, not *mhad:aθ

t-prefixed verbs with no corresponding non-prefixed verbs, keep their /t/ in the participle also.

(A) Participles of t-prefixed simple verbs

(i) Participles of t-prefixed CVCCV(C) verbs

These are formed by the prefixation of /m/ to the finite.

Examples:

tfarkas	'be searched'	mtfarkas
tsarba	'be waited upon'	mtsarbi
tfalsaf	'philosophise'	mtfalsaf
tmanyak	'poke fun at'	mtmanyak

(ii) Participles of other t-prefixed simple verbs

These participles are the same as the passive participles of the corresponding simple verbs.

Examples:

tʒraħ	'be wounded'	maʒru:ħ
twlid	'be born'	mawlu:d
tbal:	'be wet'	mablu:l

tʃra	'be bought'	miʃri
tba:ʕ	'be sold'	mabyu:ʕ

/tlha/ 'take care of', a non-passive verb, behaves in the same way as intransitive VCCV verbs (like /imʃi/ 'go'):

imʃi, intr. ma:ʃi (active participle)

tlha, intr. la:hi (active participle)

(B) Participles of t-prefixed verbs with a geminated middle consonant

These are formed by the prefixation of /m/ to the finite or the underlying form.

Examples:			
	tʕal:aq	'be hung'	mtʕal:aq
	tṣal:aħ	'be repaired'	mtṣal:aħ
	tʕaʃ:a	'dine'	mtʕiʃ:i
	tɣaṭ:a	'cover yourself'	mtɣuṭ:i
	tdaf:a	'warm yourself'	mtdif:i
	tman:a	'wish'	mtmin:i

/mtdif:i/ is phonetically [mˀd:íf:i].

(C) Participles of t-prefixed (C)A:CV(C) verbs

These are formed in the same way.

Examples:			
	tʕa:qib	'be punished'	mtʕa:qib
	tra:na	'train', intr.	mtra:ni
	tðaṛ:rib	'fight', intr.	mtðaṛ:rib

(D) Participles of t-prefixed ku:l, xu:ð, ra

These, too, are formed in the same way:

t:a:kil	'be eaten'	mt:a:kil

t:a:xiɔ 'be taken' mt:a:xiɔ

/trɔ/ 'be seen' does not form a participle.

(d) Participles of t-infixed verbs

These are formed by the prefixation of /m/ to the underlying form.

Examples:	stɑ:d	'hunt', tr.	mstɑ:d
	ħtal:	'conquer,' tr.	mħtal:
	ħtram	'respect', tr.	mħtram
	istwi	'straighten up', tr.	mistwi
	ħta:ʒ	'need', tr.	mħta:ʒ
	rta:ɦ	'rest', intr.	mrta:ɦ
	ntħor	'commit suicide', intr.	mntħor

/iʃthi/ 'fancy', unlike /istwi/, behaves like VCCV verbs such as /iʃri/: iʃthi, tr. ʃa:hi (Active participle) miʃthi (Passive participle).

/xtɑ:r/ 'choose', on the other hand, behaves like VCCVC verbs such as

/iktib/:	xtɑ:r	'choose', tr.	xɑ:tir (Active participle)
			mɑxtu:r (Passive participle).

The participle of /ʃthɑr/ 'be famous' is formed in the same way as the passive participles of VCCVC verbs: ʃthɑr, intr. mɑʃhu:r

(e) Participles of st-prefixed verbs

Similarly, these are formed by the prefixation of /m/ to the underlying form.

Examples:

Examples:	staʕmal	'use', tr.	mstaʕmal
	sta:ðin	'invite', tr.	msta:ðin
	stadʕa	'invite', tr.	mstidʕi
	stan:a	'wait', tr.	mstin:i
	sta:nis	'get used to', intr.	msta:nis
	staslam	'become Muslim', intr.	mstaslam
	staðna	'become rich', intr.	mstiðni

(f) Participles of CCA:C verbs

These are formed in the same way.

Examples:	ṭwa:l	'become tall', intr.	mṭwa:l
	ḍʕa:f	'become slim', intr.	mḍʕa:f

(g) Participles of loan verbs

Loan verbs form their participles in same way as the corresponding non-loan verbs, that is, by the prefixation of /m/.

Examples:	sarbi	'wait upon', tr.	msarbi
	riygil	'fix', tr.	mriygil
	ra:ni	'train', tr.	mra:ni
	tplanʒa	'dive', intr.	mtplanʒi
	tra:na	'train', intr.	mtra:ni
	triybil	'dribble', intr.	mtriybil

2. Gender and Number

Participles are inflected for gender (feminine) and number (plural).

The uninflected participle is in the masculine singular.

Examples:	ka:tib	'writing'
	mtik:i	'leaning'
	miʃri	'bought'

A. Feminine Gender

(1) Participles ending in a consonant

These form their feminine by the suffixation of (A).

Examples:	maktu:b	'written'	maktu:b a
	mɦtal:	'conquering' or 'conquered'	mɦtal: a
	mrta:ɦ	'rested'	mrta:ɦ a

When relevant, the rule for final vowel deletion and metathesis (Rule (1), Chapter I) applies to participles:

Final vowel deletion:

ka:tib	'writing'	ka:tb a
ʃa:did	'catching'	ʃa:d: a
mfarkas	'searching' or 'searched'	mfarks a

Metathesis:

mntɦor	'committed suicide'	mntoɦr a
mɦtrom	'respecting' or 'respected'	mhtorm a

(2) Participles ending in a vowel

Similarly, these form their feminine by the suffixation of (A). The structure of the stem, however, undergoes a change, following regular morphological rules which modify the general rule for vowel lengthening (Rule (2), Chapter I):

Rule (10) (morphological) : If a stem ends in /i/, this /i/ is replaced by /y/ if (a) a stem such as CV:Ci (other than proper adjectives/nouns) is followed by the feminine marker (A);

(b) a stem prefixed with /m/ (where the /m/ is not immediately followed by a vowel taking primary stress and with the exception of stems containing the suffix /ʒi/ like /maktba:ʒi/) is followed by the feminine marker (A).

Rule (2), Chapter I, and rule (10(b)), above, would generate such examples as the following:

muqli	[múqli]	*muqli a	muqli: a	'fried'
mistwi	[místwi]	*mistwi a	mistwi: a	'straightening' or straightened'
miʃri	[míʃri]	*miʃri a	miʃri: a	'bought'

Rule (10(a)) would generate such examples as:

ʃa:ri	*ʃa:ri a	ʃa:ry a	'buying'
ma:ʃi	*ma:ʃi a	ma:ʃy a	'going, walking'

Rule (10(b)) would generate such examples as:

mra:ni	*mra:ni a	mra:ny a	'training' or 'trained'
mtxub:i	*mtxub:i a	mtxub:y a	'hiding'

Note that when /m/ is immediately followed by a vowel which does not take primary stress (as opposed to [múqli] 'fried', for example, which does) the final vowel of the stem is deleted and replace by /y/ before an (A) suffix.

Examples:	[muɣún:i]	*muɣun:i a	muɣun:y a	'singer'
	[muħá:mi]	*muħa:mi a	muħa:my a	'lawyer').

8. Plural

(1) Participles ending in a consonant

These form their plural by the suffixation of /i:n/.

Examples:	maktu:b	'written'	maktu:b i:n
	mħtal:	'conquering' or 'conquered'	mħtal: i:n

The rule for final vowel deletion and metathesis (Rule (1), Chapter I) applies to the plural as well.

Final vowel deletion:

ka:tib	'writing'	ka:tb i:n
mfarkas	'searching' or 'searched'	mfarks i:n

Metathesis:

mnthor	'committed/suicide' or committing	mntahr i:n
mhtram	'respecting' or 'respected'	mhtarm i:n

(2) Participles ending in a vowel

These also form their plural by the suffixation of /i:n/. Two additional morphological rules need to be introduced:

Rule (11) : If the suffix begins in a long vowel, the final vowel of the stem is not lengthened but deleted , if it is the same as the vowel of the suffix, or if it is (A) and the suffix is /i/ (except when the stem contains only one vowel).

Rule (12) : If a stem ends in one of the vowels /i/ or /u/, this is replaced by /y/ or /w/ respectively if

(a) a CV:Ci stem (only proper adjectives/nouns) is followed by the plural suffix /i:n/;

(b) a CCV stem is followed by the plural suffix /i:n/;

(c) a stem prefixed with /m/ immediately followed by a vowel taking primary stress, is followed by the plural suffix /i:n/.

Rule (12(c)) works hand in hand with rule (11). Indeed, the verbs covered by rule (12(c)) can also be dealt with by rule (11), yielding different phonological forms in each case. These forms are then in free variation.

Rule (11) would generate such examples as the following:

ʃa:ri	*ʃa:ri i:n	ʃa:r i:n	'buying'
ma:ʃi	*ma:ʃi i:n	ma:ʃ i:n	'going, walking'
mra:ni	*mra:ni i:n	mra:n i:n	'training' or 'trained'
mtxub:i	*mtxub:i i:n	mtxub: i:n	'hiding'

Rules (11) and (12(c)) would generate such examples as:

muqli	*muqli i:n	muql i:n	'fried'	(by Rule (11))
muqli	*muqli i:n	muqly i:n		(Rule (12(c))
mistwi	*mistwi i:n	mistw i:n	'straightening' or 'straightened'	(by Rule (11))
mistwi	*mistwi i:n	mistwy i:n		(Rule (12(c))
miʃri	*miʃri i:n	miʃr i:n	'bought'	(by Rule (11))
miʃri	*miʃri i:n	miʃry i:n		(Rule (12(c))

Rules (12(a)) and (12(b)) do not apply to participles. Rule (12(a)) would generate such an example as:

su:ri	*su:ri i:n	su:ry i:n	'Syrian'

Rule (12(b)) would generate such examples as:

ðki	*ðki i:n	ðky i:n	'intelligent'
ɦlu	*ɦlu i:n	ɦlw i:n	'sweet'

C. Conclusion

Inflected participles behave in a peculiar way. Indeed, one may wonder why /miʃr i:n/, for example, is in free variation with /miʃry i:n/ while /ʃa:r i:n/, for example, is not in free variation with */ʃa:ry i:n/.

This oddity is further increased by the fact that for some participles, two structures seem possible (not only in the plural but in the feminine also).

Example:	Participle	Feminine	Plural	
	mstidʔi	mstidʔy a or mstidʔi: a	mstidʔ i:n or mstidʔy i:n	'inviting' or 'invited'

In some idiolects, /mtxub:i/ 'hiding' would yield /mtxubi: a/ in the feminine, but /mtxub:y a/ remains more frequent.

3. Participles as Nouns and Adjectives

Active participles may occur as nouns and adjectives.

Examples:	Nouns:	sa:riq	'thief'
		ṭa:lib	'beggar'
		qa:ḍi	'judge'
		qa:yid	'chief'
	Adjectives :	ba:rid	'cold'
		ɣa:liṭ	'wrong'
		ṣa:fi	'clear'
		ɣa:li	'expensive'

Similarly, passive participles may occur as nouns and adjectives.

Examples:	maṣru:f (noun)	'pocket money'
	marḥu:m (noun)	'deceased'
	maʕʒu:n (noun)	'jam'
	mahbu:l (noun and adjective)	'madman, mad'
	mafhu:l (adjective)	'open'

4. Rules for the participle

A. Participles of simple stems

(a) Participles of VCCVC verbs

Word : A

Lexeme (A) : A'

Form (A') : Z

Structure (Z) : V1 & C1 & C2 & V2 & C3

Class (A) : verb or ...

Subclass (A) : [F] finite or [Pt] participle

[Pt] voice (A) : [Ac] active or [Ps] passive

Form (A) : {ϕ or W} &. X & {ϕ or Y}

Structure (X) : = (Z) except that

[Ac] structure (X) : C1 & V1 & C2 & V2 & C3,

length (V1) : long, V1=(A), V2=/i/

[Ps] V1(X)=(A), V2(X)=/u/, length /u/ : long

Structure (W) : [Ps] C, C = /m/

(b) Participles of VCCV verbs

Structure (Z) : V1 & C1 & C2 & V2

Form (A) : {ϕ or W} & X & {ϕ or Y}

Structure (X) : = structure (Z) except that

[Ac] structure (X) : C1 & V1 & C2 & V2, length

(V1) : long, V1=(A), V2=/i/

Structure (W) : [Ps] C, C = /m/

(c) Participles of CVC: verbs

Structure (Z) : C1 & V1 & C2, length (C2) : long

Form (A) : {ϕ or W} & X & {ϕ or Y}

Structure (X) : = structure (Z) except that

[Ac] structure (X) : C1 & V1 & C2 & V2 & C3,

length (V1): long, C2=C3, V1=(A), V2=/i/

[Ps] structure (X) : V1 & C1 & C2 & V2 & C3,

length (V2): long, C2=C3, V1=(A), V2=/u/

Structure (W) : [Ps] C, C = /m/

(d) Participles of CV:C verbs

(d) Participles of CV:C verbs

Structure (Z) : C1 & V1 & C2, length (V1) : long

Form (A) : {ϕ or W} & X & {ϕ or Y}

Structure (X) : = structure (Z) except that

[Ac] structure (X) : C1 & V1 & C & V2 & C2,
length (V1) : long, C=/y/, V1=(A), V2=/i/

[Ps] structure (X) : V1 & C1 & C & V2 & C2,
length (V2) : long, C=/y/, V1=(A), V2=/u/

Structure (W) : [Ps] C, C = /m/

(e) Participles of ku:l, xu:ð and i:ʒa

1. ku:l and xu:ð

Structure (Z) : C1 & V1 & C2, length (V1) : long

Form (A) : {ϕ or W} & X & {ϕ or Y}

Structure (X) : (Z) except that

[Ac] structure (X) : V1 & C1 & V2 & C2, length
(V1): long, V1 = a, V2 = /i/

[Ps] structure (X) : C & Ac structure (X),
C = /t/, length (C) : long

Structure (W) : [Ac] C, C = /m/ or /w/

[Ps] C, C = /m/

2. i:ʒa

Structure (Z) : V1 & C1 & V2, length (V1) : long

Form (A) : {ϕ or W} & X & {ϕ or Y}

Structure (X) : = structure (Z) except that

[Ac] structure (X) : C1 & V1 & C & V2, length
(V1) : long, C = /y/, V1 = /a/, V2 = /i/

(f) Participles of CVCCVC verbs

Structure (Z) : C1 & V1 & C2 & C3 & V2 & C4

Form (A) : {ϕ or W} & X & {ϕ or Y}

[Pt] structure (X) : = structure (Z)

[Pt] structure (W) : C, C = /m/

(g) Participles of CACCi verbs

Structure (Z) : C1 & V1 & C2 & C3 & V2

Form (A) : {ϕ or W} & X & {ϕ or Y}

[Pt] structure (X) : = structure (Z)

Structure (W) : C, C = /m/

B. Participles of derived stems

(a) Participles of (C)AC:AC verbs

Structure (Z) : C1 & V1 & C2 & V2 & C4, length (C2) : long

Form (A) : {ϕ or W} & X & {ϕ or Y}

[Pt] structure (X) : = structure (Z)

[Pt] structure (W) : C, C = /m/

(b) Participles of CAC:i verbs

Structure (Z) : C1 & V1 & C2 & V2, length (C2) : long

Form (A) : {ϕ or W} & X & {ϕ or Y}

[Pt] structure (X) : = structure (Z)

[Pt] structure (W) : C, C = /m/

(c) Participles of (C)A:CVC verbs

Structure (Z) : C1 & V1 & C2 & V2 & C3, length (V1) : long

Form (A) : {ϕ or W} & X & {ϕ or Y}

[Pt] structure (X) : = structure (Z)

[Pt] structure (W) : C, C = /m/

(d) Participles of CA:Ci verbs

Structure (Z) : C1 & V1 & C2 & V2, length (V1) : long

Form (A) : {ϕ or W} & X & {ϕ or Y}

[Pt] structure (X) : = structure (Z)

[Pt] structure (W) : C, C = /m/

(e) Participles of t-prefixed CVCCVC verbs

Structure (Z) : C & C1 & V1 & C2 & C3 & V2 & C4, C = /t/

Form (A) : {ϕ or W} & X & {ϕ or Y}

[Pt] structure (X) : = structure (Z)

[Pt] structure (W) : C, C = /m/

(f) Participles of t-prefixed CACCi verbs

Structure (Z) : C & C1 & V1 & C2 & C3 & V2, C = /t/

Form (A) : {ϕ or W} & X & {ϕ or Y}

[Pt] structure (X) : = structure (Z)

except that

V2 = /i/

[Pt] structure (W) : C, C = /m/

(g) Participles of t-prefixed (C)AC:AC verbs

Structure (Z) : C & C1 & V1 & C2 & V2 & C3, length (C2) : long,
C = /t/

Form (A) : {∅ or W} & X & {∅ or Y}

[Pt] structure (X) : = structure (Z)

[Pt] structure (W) : C, C = /m/

(h) Participles of t-prefixed CAC:i verbs

Structure (Z) : C & C1 & V1 & C2 & V2, length (C2) : long, C = /t/

Form (A) : {∅ or W} & X & {∅ or Y}

[Pt] structure (X) : = structure (Z)
except that
V2 (X) = /i/

[Pt] structure (W) : C, C = /m/

(i) Participles of t-prefixed (C)A:CVC verbs

Structure (Z) : C & C1 & V1 & C2 & V2 & C3, length (V1) : long,
C = /t/

Form (A) : {∅ or W} & X & {∅ or Y}

[Pt] structure (X) : = structure (Z)

[Pt] structure (W) : C, C = /m/

(j) Participles of t-prefixed CA:Ci verbs

Structure (Z) : C & C1 & V1 & C2 & V2, length (V1) : long, C = /t/

Form (A) : {∅ or W} & X & {∅ or Y}

[Pt] structure (X) : = structure (Z)

except that

V2 (X) = /i/

[Pt] structure (W) : C, C = /m/

(k) <u>Participles of t-prefixed ku:l and xu:</u>

Structure (Z) : C & V1 & C1 & V2 & C2, length (C) & (V1) : long,

C = /t/

Form (A) : {ø or W} & X & {ø or Y}

[Pt] structure (X) : = structure (Z)

[Pt] structure (W) : C, C = /m/

(l) <u>Participles of t-infixed verbs</u>

Structure (Z) : C1 & C & C2 & V1 & C3, C = /t/

or C1 & C & V1 & C2, length (V1) : long

or C1 & C & V1 & C2, length (C2) : long

or V1 & C1 & C & C2 & V2

Form (A) : {ø or W} & X & {ø or Y}

[Pt] structure (X) : = structure (Z)

[Pt] structure (W) : C, C = /m/

(m) <u>Participles of st-prefixed verbs</u>

Structure (Z) : C0 & C & V1 & C1 & C2 & V2 & C3, C0=/s/, C=/t/ } 1

or C0 & C & V1 & C1 & V2 & C2, length(V1) : long }

or C0 & C & V1 & C1 & C2 & V2 } 2

or C0 & C & V1 & C1 & V2, length (C1) : long }

1. Form (A) : {ø or W} & X & {ø or Y}

[Pt] structure (X) : = structure (Z)

[Pt] structure (W) : C, C = /m/

2. Form (A): {ϕ or W} & X & {ϕ or Y}

[Pt] structure (X) : = structure (Z)

except that

V2 (X) = /i/

[Pt] structure (W) : C, C = /m/

(n) Participles of CCA:C verbs

Structure (Z) : C1 & C2 & V1 & C3, length (V1) : long

Form (A) : {ϕ or W} & X & {ϕ or Y}

[Pt] structure (X) : = structure (Z)

[Pt] structure (W) : C, C = /m/

In these rules, I have duplicated a good deal of information, in the hope that this will make the reader's task easier. It would, however, have been possible, in principle, to collapse all these formal rules into a single complex rule, in which duplication could have been avoided.

CHAPTER IV : THE MORPHOLOGY OF THE NOUN

I. DERIVATIONAL RELATIONS

A. Affixed nouns

I shall mention these only briefly, because, on one hand, they behave morphologically in the same way as other nouns, and on the other, there does not always seem to be a clear-cut morphological relationship between the affixed noun and the stem from which it might have been derived. This is due, perhaps, to the fact that the derivation is, in most cases, historical.

1. m-prefixed nouns

About twenty different patterns make up all of these nouns. Most patterns include very few examples.

Examples:	mVCVC:V	muðun:i	'singer'
	mVCV:CV	muħa:mi	'lawyer'

At least three patterns, however, include a notable number of examples. They are:

Pattern	Example	
mVCCV:C	/mifta:ħ/	'key'
mVCCCV	/manʃfa/	'towel'
mVCCVC	/maktib/	'school'

m-prefixed nouns may be given a semantic classification, but exceptions abound. The pattern /mVCCA:C/, for example, corresponds to nouns meaning 'tools'.

Examples:	miħro:θ	'plough'
	mifta:ħ	'key'
	musmɑ:r	'nail'
	mihra:s	'mortar and pestle'

/mungo:r/ 'beak' may perhaps be considered a 'tool'. /miʃħa:h/ 'miser' is an exception.

The pattern /mVCCVC/ corresponds to nouns which are the names of 'public institutions'.

Examples: maktib 'school'

maʕmil 'factory'

maṭʕim 'restaurant'

maskin 'house'

matħif 'museum'

/manḍir/ 'landscape', /madfaʕ/ 'cannon', /mislim/ 'Moslem' are exceptions.

The pattern /mVCVC:VC/ corresponds to nouns which are names of occupations or professions.

Examples: muʕal:im 'teacher'

mufaq:id 'inspector'

musaw:ir 'photographer'

mumaθ:il 'actor'

Finally, a pattern such as /mVCCCV/, to take just one example, corresponds to nouns of different semantic values.

Examples: manʃfa 'towel'

maktba 'book shop'

morwħa 'fan'

maħkma 'court-house'

2. Suffixed nouns

(a) i-suffixed nouns

These are not very common. /i/ is suffixed to some plural nouns. Generally, the suffixed noun is the name of an occupation.

Examples:

sɑb:ɑ:t	'a pair of shoes'
sbɑ:bit	'pairs of shoes'
sbɑ:bt i	'shoe-repairer'
munga:la	'watch'
mna:gil	'watches'
mna:gl i	'watch repairer'
ɦanu:t	'shop'
ɦwa:nit	'shops'
ɦwa:nt i	'shop-keeper'

Even though /ɦli:b/ 'milk' does not have a plural, due to being a mass noun, it is given an analogical structure to that of the above-mentioned examples, before this particular /i/ suffix:

ɦli:b	'milk'
ɦla:yb i	'milkman'

Note that the general rule for final vowel deletion and metathesis (Rule (1), Chapter I) applies to all of the above examples.

/i/ is also encountered in such instances as /muðun:i/ 'singer', and /muɲa:mi/ 'lawyer', but, in this case, /i/ is not directly added to the stem but is rather a part of it. In fact, the whole structure of /muðun:i/ or /muɲa:mi/ is derived from /ðɑn:i/ and /ɲa:mi/ respectively. Similarly, the /i/ in /firmli/ 'male nurse' is undetachable from the rest of the word, perhaps because it is a loan word (from French 'infirmier').

(b) ʒi-suffixed nouns

Similarly, these are usually names of occupations. /ʒi/ is suffixed to some singular nouns.

Examples:

qahwa	'cup of coffee, café'
qahwa: ʒi	'waiter'
maktba	'book shop'
maktba: ʒi	'book seller'

Notice that the final vowel is lengthened in accordance with the rule for vowel lengthening (Rule (2), Chapter I).

/bus̤ta: ʒi/ 'postman' is derived from /bu:s̤ta/ 'post-office', but somehow the /u/ vowel has lost its length in /bus̤ta: ʒi/.

(c) -/i:a/-suffixed nouns

These may be divided into three categories:

(i) Nouns related to simple stems (where the relation is historical).

Examples:

ʃarbi:a	'water jug'	from	uʃrub	'drink'
ṣahri:a	'party'	from	ṣahar	'stay up late'
sukri:a	'sugar bowl'	from	sukr	'sugar'
ʃahri:a	'salary'	from	ʃhar	'month'
hur:i:a	'freedom'	from	hur:	'free'
hdi:a	'present	from	ihdi	'give a present'
ʃbubi:a	'handsomeness'	from	ʃba:b	'handsome'
ħmuri:a	'redness'	from	ahmar	'red'

(ii) Nouns with no corresponding simple stems.

Examples: bat:ani:a 'blanket'

kakawi:a 'peanuts'

zarbi:a 'carpet'

ʃaʃi:a 'Tunisian traditional hat'

qaʃ:abi:a 'Tunisian traditional coat'

(iii) Loan words

Examples:

ʒili:a	'cardigan'	from 'gilet'
sandri:a	'ashtray'	from 'cendrier'
ʃimini:a	'fire-place, chimney'	from 'cheminée'
briki:a	'lighter'	from 'briquet'
tabli:a	'apron'	from 'tablier'

8. Verbal nouns

These are abstract categories which are derived from verbs. They denote an action and have the value of infinitives (Talmoudi (1979). Like mass nouns they are morphologically different from most other nouns in so far as they do not form plurals. Usually different verbal noun patterns can be derived from a single verb type. Consequently, the structure of the verbal noun is not generally predictable from the structure of the underlying form of the verb.

1. VCCVC

At least eight verbal noun patterns can be derived from these verbs:

Pattern	Example			
-CVCC	ʃurb	'drinking'	(uʃrub	'drink')
-CCu:C(A)	wqu:f	'standing'	(u:qif	'stand up')
	bru:da	'cooling'	(ibrid	'cool down')
-CCA:C	rqa:d	'sleeping'	(urqud	'sleep')
-CCi:C(A)	xsi:l	'washing'	(axsal	'wash')
	kti:ba	'writing'	(iktib	'write')
-CACCA:n	maʃta:n	'combing'	(umʃut	'comb')

-CCA:CA	ħfa:ð	'learning' (by heart)	(aħfað 'learn by heart)
-CCAC	ʕtaʃ	'state of being thirsty'	(aʕtaʃ 'be thirsty)
-CVCCA	tulba	'begging'	(utlub 'beg')

The fact that the structure of the verbal noun cannot be predicted from that of the underlying form of the verb can be shown by the following table.

Table I	Underlying form of the verb		Verbal noun
	ibziq	'spit'	bza:q
	inzil	'get down'	nzu:l
	ibʕid	'go away'	buʕd
	iħfir	'dig'	ħfi:r
	ifhim	'understand'	fahma:n
	iʕbid	'worship'	ʕba:da
	izrib	'hurry'	zarba

2. VCCV verbs

These have four different verbal noun patterns.

Pattern	Example			
-CACy	bany	'building'	(ibni	'build')
	haʃy	'stuffing'	(ahʃi	'stuff')
-CCA	bka	'crying'	(ibki	'cry')
	ʃra	'buying'	(iʃri	'buy')
-CACyA:n	qalya:n	'frying'	(aqli	'fry')
	ʃawya:n	'grilling'	(iʃwi	'grill')
-CCV:yA	qra:ya	'reading'	(aqra	'read')

Some verbal nouns of the /CACy/ and /CCA/ type are in free variation with /CACyA:n/.

Examples: maʃy = maʃya:n 'going'

ʃra = ʃarya:n 'buying'

3. CVC: verbs

With these verbs, the situation is somewhat different. Indeed, most CVC: verbs correspond to the following verbal noun pattern CAC:A:n.

Examples:	ʃad:a:n	'catching'	(ʃid:	'catch')
	daz:a:n	'pushing'	(diz:	'push')
	qaṣ:a:n	'cutting'	(quṣ:	'cut')

There are a few other verbal noun patterns, but examples are very rare.

Examples:	mCAC:A	mħab:a	'liking, loving'	(ħib: 'like, love)
	CCAC	blal	'wetting'	(bil: 'wet')
	CAC:A	ʕas:a	'guarding'	(ʕis: 'guard')

4. CV:C verbs

Similarly to VCCV(C) verbs, the structure of the verbal noun is not predictable from that of the underlying form of these verbs. There are five different patterns.

Patterns	Examples			
-Cu:C(A)	bu:s	'kissing'	(bu:s	'kiss')
	ħu:fa	'stealing'	(ħu:f	'steal')
-Ci:C(A)	bi:ʕ	'selling'	(bi:ʕ	'sell')
	ɣi:ra	'jealousy'	(ɣi:r	'be jealous')
-CyA:C(A)	qya:s	'measurement'	(qi:s	'measure')
	zya:da	'addition'	(zi:d	'add')
-CV:CA:n	su:qa:n	'driving'	(su:q	'drive')
	ʒi:ba:n	'bringing'	(ʒi:b	'bring')
-mCA:C	mba:t	'staying for the night'	(ba:t	'stay for the night')

Some verbal nouns of the /Cu:C/ and /Ci:C/ types are in free variation with /CV:CA:n/.

Examples: ʕu:m ʕu:ma:n 'swimming' (ʕu:m 'swim')

bi:ʕ bi:ʔa:n 'selling' (bi:ʕ 'sell')

5. ku:l, xu:ð, i:ʒa

Their verbal nouns are, respectively: ma:kla 'eating'

ma:xða 'taking'

ʒay: 'coming'

/ʒay:/ is in free variation with /ʒay:a:n/.

6. CVCCVC verbs

The most regular verbal noun pattern has the following structure:

-tCACCi:C tfarki:s 'searching' (farkas 'search')

tdarʒi:ħ ['d:arʒi:ħ] 'swinging' (darʒaħ 'swing')

Other patterns include:

-CACCCA tarʒma 'translating' (tarʒam 'translate')

-CVCCA:C duwla:ʃ 'going for a walk' (duwliʃ 'go for a walk')

7. CACCi verbs

The only verbal noun pattern of which I am aware is tCACCya.

Examples: tsarbya 'waiting upon' (sarbi 'wait upon')

tmorkya 'scoring' (morki 'score')

8. Verbs with a geminated middle consonant

The gemination of the middle consonant is lost in the verbal nouns.

(a) <u>(C)AC:AC verbs</u>

The most regular pattern has the following structure:

tACCi:C

Examples:	tosfi:q	'clapping'	(sof:aq	'clap')
	taʕli:q	'hanging'	(ʕal:aq	'hang')

The following patterns are also encountered, but they are less common than the above pattern.

Pattern	Example			
-CCA:C(A)	xyo:ta	'sewing'	(xay:at	'sew')
	ʕyo:t	'shouting'	(ʕay:at	'shout')
	kla:m	'talking'	(kal:am	'talk')
-ACA:C	aðа:n	'calling for prayer'	(að:an	'call for prayer')

(b) <u>CAC:i verbs</u>

The most regular pattern is tVCCya.

Rule (9) (Chapter III, Section VI) applies here too: the first vowel of the verbal noun is either /u/ or /i/ depending on the quality of the first vowel of the underlying form of the verb.

Examples:	tuxbya	'hiding'	(xab:i	'hide')
	tiñya	'taking off'	(nañ:i	'take off')

Another pattern is also encountered but it is very rare:

CCA eg. ðna 'singing'

9. <u>(C)A:CV(C) verbs</u>

The most common pattern is the following.

<u>Examples</u>

tCA:Ci:C	tña:yi:l	'cheating'	(ña:yil	'cheat')
	tʕa:ni:q	'hugging'	(ʕa:niq	'hug')

At least ~~three~~ Four other patterns are also encountered.

Pattern	Example			
-CCA:C	sma:ħ	'forgiving'	(sa:maħ	'forgive')
-mCA:CCA	mħa:wla	'trying'	(ħa:wil	'try')
-CVCC	ʕark	'fighting'	(ʕa:rik	'fight')
-mCA:Cya	mra:nya	'training'	(ra:ni	'train')

10. t-prefixed verbs

Their verbal nouns (when relevant) have the same structures as those of the verbal nouns of the corresponding non-prefixed verbs.

11. t-infixed verbs

Usually, the verbal noun pattern for /CtCAC/ and /CtAC:/ verbs is the following: CtiCA:C.

Examples:	ħtila:l	'conquering'	(ħtal:	'conquer')
	xtira:ʕ	'inventing'	(xtraʕ	'invent')
	ħtira:m	'respecting'	(ħtram	'respect')

/CtA:C/ verbs share the two following verbal noun patterns:

Pattern	Example			
-CAtCA:n	xatra:n	'choosing'	(xta:r	'choose')
-mACyiC	masyid	'fishing' or 'hunting'	(sta:d	'fish, hunt')

/iʃthi/ 'fancy' has the following verbal noun: /ʃahya:n/.

12. st-prefixed verbs

Only a few verbs form verbal nouns.

Underlying form of the verb		Verbal noun	
sta:nis	'get used to'	sti:na:s	'getting used to'
sta:ðin	'invite'	sta:ði:n	'inviting'
staʕmal	'use'	stiʕma:l	'using'
storʒaʕ	'get(something) back'	storʒi:ʕ	'getting (something) back'

13. CCA:C verbs

Usually, verbs denoting colour or quality and defect have the following verbal noun pattern: CCu:Ci:a

Examples:	byu:ði:a	'whiteness'	(bya:ð	'become white')
	sfu:ri:a	'yellowness'	(sfa:r	'become yellow')
	ʕqu:li:a	'quietness'	(ʕqa:l	'become quiet')

Verbs denoting size, on the other hand, have the following pattern: CVCC.

Examples:	qusr	'shortness'	(qsa:r	'become short')
	kubr	'oldness'	(kba:r	'become old')
	tuwl	'tallness'	(twa:l	'become tall')
	ðiyq	'narrowness'	(ðya:q	'become narrow')

The above semantic classification is not without exceptions. The verbal noun derived from /sha:l/ 'become easy', for example, is /suhl/. Similarly, /qda:m/ 'become old' (of things) would yield /qudm/.

Finally, at least, one verb has yet a different verbal noun pattern:

nða:f	'become clean'	nða:fa	'cleanliness'

II. GENDER

A. Semantics

In this section, I shall distinguish between two types of syntactically feminine nouns which are semantically different, but morphologically similar. I shall call the first type 'female' and the second type 'individual singular'.

1. Female

'Male' nouns (either of human beings or of animals), have usually 'female' counterparts.

Examples:	kalb	'male dog'	kalba	'bitch'
	ro:ʒil	'man'	mra	'woman'

2. Individual singular

(a) Of collective plurals and mass nouns

Collective plurals and mass nouns are semantically plural but syntactically singular (and very often masculine). Some collective plurals and mass nouns can form individual singulars which are semantically singular and syntactically singular and feminine. These, as well as the above-mentioned 'female' nouns are treated in the same way by the morphology.

Examples:	Collective plural and mass noun		Individual singular	
	burdga:n	'orange'	burdga:na	'an orange'
	ʃʕor	'hair'	ʃaʕra	'a hair'
	ɦu:t	'fish'	hu:ta	'a fish'
	xubz	'bread'	xubza	'a loaf'

Collective plurals and mass nouns ending in a vowel, and some

collective plurals and mass nouns ending in a consonant, do not form individual singulars. They are of no interest here because they are morphologically irrelevant.

Examples: madani:na 'tangerines'

baʃku:tu 'biscuits'

ʒbin 'cheese'

sukr 'sugar'

(b) Of abstract nouns (verbal nouns)

Some verbal nouns can form individual singulars which are syntactically feminine. They are treated by the morphology in the same way as 'female' nouns and individual singulars of collective plurals and mass nouns.

Examples:	Verbal noun		Individual singular	
	tangi:z	'jumping'	tangi:za	'a jump'
	maʃy	'going, walking'	maʃya	'a walk'
	ħsa:b	'counting'	ħisba	'total'
	ʃṭi:ħ	'dancing'	ʃaṭħa	'a dance'
	ʕu:m	'swimming'	ʕu:ma	'a swim'
	ʃra	'buying'	ʃarya	'a purchase'

B. Morphology

Here, too, I shall make a distinction between two types of feminine. The first type is the uninflected feminine while the second is the inflected feminine which has just been described above, under 'Semantics' .

1. Masculine gender

Nouns ending either in a consonant or a /u/ or /i/ vowel are usually

in the masculine.

Examples: ba:b 'door'

bɑ:ku 'packet, parcel'

kursi 'chair'

There are, however, a few exceptions. Indeed, some consonant-final and some /i/-final nouns are in the feminine gender (usually, names of countries and cities, and names of parts of the body, and nouns ending in /t/ are in the feminine).

Examples: bari:z 'Paris'

sa:q 'leg'

bi:t 'room'

biskla:t 'bicycle'

dɑ:r 'house'

bla:d 'town'

taksi 'taxi'

2. Uninflected feminine gender

Nouns ending in an (A) vowel are usually in the feminine.

Examples: sin:a 'tooth'

xɑri:tɑ̣ 'map'

fɑrgi:tɑ̣ 'fork'

There are, however, a few exceptions:

aʕma 'blind man'

mamʃa 'alley'

ðtɑ̣ 'cover'

ʕʃa 'dinner'

ma 'water'

3. Inflected feminine gender

(a) 'Female'

Generally, 'male' nouns form their feminine by the suffixation of (A).

Examples:	kalb	'male dog'	kalb a	'female dog'
	ʒad:	'grandfather'	ʒad: a	'grandmother'
	ʕarbi	'male Arab'	ʕarbi: a	'female Arab'
	ʕdu	'male enemy'	ʕdu: a	'female enemy'
	mislim	'male Muslim'	mislm a	'female Muslim'
	bṭal	'hero'	baṭl a	'heroine'
	muɣun:i	'male singer'	muɣun:y a	'female singer'

Notice that rules (1) and (2) (Chapter I) apply to the above nouns, when relevant. Similarly, rule (10b)(Chapter III) applies to /muɣun:i/ .

The relationship between /malak:/ 'king' and /mali:ka/ 'queen' is more complicated, due, perhaps, to the fact that they are Classical Arabic loan words.

Some 'male' nouns, however, do not form their feminine by the suffixation of (A), but have suppletive 'female' counterparts.

Examples:	raːʒil	'man'	mra	'woman'
	wlid	'boy'	ṭufla	'girl'
	wild	'son'	bint	'daughter'
	xu	'brother'	uxt	'sister'
	bu	'father'	um:	'mother'
	ʒmal	'male camel'	naːqa	'female camel'
	sṭːd	'lion'	labwa	'lioness'

(b) Individual singular (of collective plural and mass nouns)

Similarly, collective plural and mass nouns form their feminine (when relevant) by the suffixation of (A).

Examples:	zitu:n	'olive'	zitu:n a	'an olive'
	bat̤:i:x	'melon'	bat̤:i:x a	'a melon'
	qa:ris̤	'lemon'	qa:rs̤ a	'a lemon'
	lħam	'meat'	laħm a	'a piece of meat'
	tmar̤	'dates'	tamr̤ a	'a date'

(c) Individual singular (of verbal nouns)

Generally, verbal nouns form their individual singulars by the suffixation of (A).

Examples:	Verbal noun patterns	Individual singulars	
	CVCC	bany a	'building'
	CV:C	bi:ʕ a	'sale'
	CCVC	ʕat̤ʃ a	'thirst'
	tCVCCi:C	tfarki:s a	'search'
	CVCV:C	dula:ʃ a	'walk'
	tVCCi:C	tangi:z a	'jump'
	tCV:Ci:C	tð̤a:ri:b a	'fight'

Some verbal noun patterns, however, undergo an internal change.

Examples:	CCu:C	horba	'escape'
	CCA:C	roqda	'sleep'
	CCi:C	xosla	'wash'
	CCV	ʃarya	'purchase'

/ɣna/ 'singing' (which belongs to the last pattern, CCV) has a different individual singular, /ɣna:ya/ 'song'.

Verbal nouns ending in /A:n/ lose the final /n/ and consequently the length of the final vowel.

Examples:

qɑs:ɑ:n	qɑs:ɑ	'cut'
du:rɑ:n	du:rɑ	'walk'

III, UNDERLYING FORM OF THE NOUN

Usually, this corresponds to the structure of the singular or the plural. In some cases, it does not. H.Wise (1979) was aware of this phenomenon: 'To relate such forms, it is necessary to set up underlying representations whose syllabic structure often proves to be closer to that of earlier forms of the language.'

Examples:

Underlying form:	kɑrhaba	'car'
Singular:	kɑrhba	
Underlying form:	tla:miða	'pupils'
Plural:	tla:mða	

The importance of these separate underlying forms will be made clear in Section IV below, and in Chapter VI, 'Clitics'. To take one example, most nouns ending in (A) replace it with /it/ immediately before a non-plural suffix.

Examples: The underlying form of /bogro/ 'cow' is:

bogrɑ

*bɑgr it i:n	bɑgr t i:n	'two cows'

The underlying form of /kɑrhba/ 'car' is:

kɑrhaba

*kɑrhab it i	kɑrhab t i	'my car'
*kɑrhab it ha	kɑrhb it ha	'her car'

Notice that the rule for final vowel deletion (Rule (1), Chapter I) applies from right to left.

The underlying form of /tla:mɔ̀a/ 'pupils' is:

tla:miɔ̀a

*tla:miɔ̀ it i	tla:miɔ̀ t i	'my pupils'
*tla:miɔ̀ it ha	tla:mɔ̀ it ha	'her pupils'

Only those nouns ending in an (A) vowel, which have either of the following structures, have underlying forms different from their surface forms: 1. /...CCCA/(two of the consonants may be geminated)

2. /... V:CCA/ (the final consonant must not be a semi-vowel)

Examples: 1. /...CCCA/

Underlying form :	kɑrhɛbɛ	'car'
Singular :	kɑrhba	
Underlying form :	ustula	'buckets'
Plural :	ustla	
Underlying form :	musaʒ:ala	'recorder'
Singular :	musaʒ:la	

2. /... V:CCA/

Underlying form :	tɑ:wila	'table'	muðɑ:mirɑ	'adventure'
Singular :	tɑ:wla		muðɑ:mrɑ	
Underlying form :	tla:miɔ̀a	'pupils'	asa:tiɔ̀a	'teachers'
Plural :	tla:mɔ̀a		asa:tɔ̀a	

IV. DUAL

This is particular to nouns . Adjectives and verbs are not inflected for dual. Generally, countable nouns, including some nouns of measurement, may be inflected for dual. They do so by the suffix-ation of /i:n/.

Examples:				
	gorn	'horn'	garn i:n	'two horns'
	ba:b	'door'	ba:b i:n	'two doors'
	nuṣf	'half'	nuṣf i:n	'two halves'
	ha:ra	'four'	ha:r t i:n	'eight'
	i:tra	'litre'	i:tir t i:n	'two litres'
	dab:u:za	'bottle'	dab:u:z t i:n	'two bottles'
	marfiq	'elbow'	marfq i:n	'two elbows'
	ṣbuʕ	'finger'	ṣubʕ i:n	'two fingers'
	karni	'notebook'	karn i:n	'two notebooks'
	bat:u	'boat'	bat:u i:n	'two boats'
	maʕna	'meaning'	maʕn i:n	'two meanings'
	ðṭa	'cover'	ðṭa i:n	'two covers'

Notice that rule (11) (Chapter III, Section VI) applies to /karni/ and /bat:u/. It also applies to /maʕna/ and /ðṭa/. Similarly, the rule for final vowel deletion and metathesis (Rule (1), Chapter I) applies to /marfiq/ and /ṣbuʕ/.

Finally, when they are followed by a dual suffix, singular feminine nouns ending in (A) behave according to the following rule:

<u>Rule (1)</u> : The final vowel of the stem, that is (A), is deleted, and the feminine suffix /it/ added after the stem.

Examples:	bagra	'cow'	
	*bagr it i:n	bagr t i:n	'two cows'
	fargi:ṭa	'fork'	
	*fargi:ṭ it i:n	fargi:ṭ t i:n	'two forks'
	tiskra	'ticket' (underlying form: tiskira)	
	*tiskir it i:n	tiskir t i:n	'two tickets'
	ku:ra	'ball'	
	*ku:r it i:n	ku:r t i:n	'two balls'

ʃohri:a 'salary'

* ʃohri: it i:n ʃohri: t i:n 'two salaries'

In all the above examples, the first element of the /it/ suffix, that is /i/, has been deleted in accordance with rule for final vowel deletion and metathesis (Rule (1), Chapter I).

Feminine nouns of the pattern /CCV/ where the vowel is (A), behave in a different way. In fact, they behave like the third person feminine of the perfect aspect (as /mʃa:t/ 'she went'). Indeed, the (A) vowel is not deleted and the /it/ suffix is pronounced /t/. The length of the (A) vowel is due to the rule for vowel lengthening before a suffix (Rule (2), Chapter I).

Example: ʕṣa 'stick' ʕṣa: t i:n 'two sticks'

/mya/ 'hundred' behaves differently as far as the dual and plural are concerned. Indeed, the /ya/ element has, somehow, become an /i/:

*mya: t i:n mi: t i:n 'two hundreds'

*mya a:t mi a:t 'hundreds'

Notice that /mya/ behaves like the above example of the same pattern /ʕṣa/ before any other suffix.

Example: mya: t ik 'your hundred'

mya: t u 'his hundred'

Generally, the dual is in free variation with the plural preceded by /zu:z/ 'two'. In fact, most often the plural is preferred to the dual.

Examples: ka:s i:n 'two glasses' = zu:z kisa:n

ʕark t i:n 'two fights' = zu:z ʕarka:t

kaf: i:n 'two slaps' = zu:z kfu:f

Some nouns do not form duals, and the plural must be used instead.

Examples:	ro:ʒil	'man'	*ro:ʒli:n	zu:z rʒa:l	'two men'
	wlid	'boy'	*wildi:n	zu:z wla:d	'two boys'
	mrɑ	'woman'	*mrɑ:ti:n	zu:z nsa	'two women'
	fi:l	'elephant'	*fi:li:n	zu:z fyu:la	'two elephants'
	si:d	'lion'	*si:di:n	zu:z syu:da	'two lions'

For some nouns, however, (usually nouns of time and number) the dual is preferred to the plural.

Examples:	ʕa:m i:n	'two years'
	nhɔ:r i:n	'two days'
	ʒimʕ t i:n	'two weeks'
	ʃohr i:n	'two months'
	sa:ʕ t i:n	'two hours'
	alf i:n	'two thousands'
	mi: t i:n	'two hundreds'

Some historically dual nouns (names of some parts of the body, for example) when used to refer to a dual, must be preceded by /zu:z/.

Examples:	ʕi:n i:n	'eyes'	zu:z ʕi:n i:n	'two eyes'
	wiðn i:n	'ears'	zu:z wiðn i:n	'two ears'
	yd i:n	'hands'	zu:z yd i:n	'two hands'

V. PLURAL

A. Inflected feminine

1. 'Female' nouns

These form their plural by the suffixation of /A:t/.

Examples:	kalba	'female dog'	kalb a:t	'female dogs'
	qɑt:u:s	'female cat'	qɑt:u:s ɔ:t	'female cats'
	mali:ka	'queen'	mali:k a:t	'queens'
	ʕam:a	'paternal aunt'	ʕam: a:t	'paternal aunts'

mudi:ra	'head-mistress'	mudi:r ɑ:t	'head-mist-resses'
firmli:a	'nurse'	firmli: a:t	'nurses'

2. Individual singulars

Similarly, they form their plural by the suffixation of /A:t/.

Examples:	xubza	'loaf of bread'	xubz a:t	'loaves of bread'
	nzɑ:so	'a pear'	nzɑ:s ɑ:t	'pears'
	tahwi:sa	'a walk'	tahwi:s a:t	'walks'
	ʃoṯhɑ	'a dance'	ʃaṯh ɑ:t	'dances'

Notice that rule (11) (Chapter III, Section VI), which deletes the final vowel of the stem if it is followed by a long vowel-initial suffix of the same kind, applies to all the above examples.

B. Other nouns

I have eight hundred and eighteen examples with which to work. My sources of examples are the same as they were for verbs.

1. Explanation of the tables

The tables below show the number of nouns of each singular pattern that have a particular plural form. Table II shows number of nouns for each singular pattern that have a suffixed plural. Table III shows the number of nouns for each singular pattern that have a different plural. Table IV is similar to tables II and III with the difference that the number of nouns for each singular pattern that

have a particular plural, is negligible. Table V show those singular patterns which can only form suffixed plurals. Table VI is an expansion of two plural patterns shown in Table III: indeed, the patterns CCVC and CCV:C (Table III) are very general patterns which can further be divided into smaller patterns (ie. CCiC, CCAC, CCuC and CCu:C, CCA:C). General patterns are used in table III for the sake of generalization.

Table II

Singular	Plurals:				Total
	-i:n	-A	-A:t	Other	
(C)VCCV		1	76	37	114
CVC:V	1		5	9	15
CVCV:	1	1	12	11	25
CVCCVC	1			17	18
(C)VCV:CV		1	15	4	20
CVCCV:C	1		5	35	41
CVCCV:CV		1	9	13	23
CVCCCV		1	3	19	23
CVC:V:C	3	34	8	15	60
CVC:V:CV			21	10	31
CV:CV			31	11	42
CV:CCV			13	7	20
CV:CVC	2		2	25	29
CCVC	1		12	34	47

Table II continued.

Singular	Plurals: -i:n	-A	-A:t	Other	Total
CCVCCV			1	5	6
CCV:C			21	14	35
CCV:CV		1	33	23	57
CVC(:)VCi:V			3	2	5
CCV			10	2	12
CVCCi:V			6	1	7
CV:C	2		6	45	53
CVC:	1		1	16	18
Other	9	7	45		
Total	22	47	338		

Table III

Singular	Plural: CCA:CiC	CCVC	CCA:Ci	CiCA:n	CVC:A:C	CCu:CA	CCuCA:t	uCCCA	CCV:C	CACA:CiC	Other	Total
(C)VC CV	3	15	9						7		80	114
CVC: C	2	3									6	15
CVCV :C	10							1			14	25
(C)VC CVC	12									5	1	18
(C)VC V:CV	2									2	16	20
CVCC V:C	31										10	41
CVCC V:CV	13										10	23
CVCC CV	17									2	4	23
CVC: V:C	15										45	60
CVC: V:CV	10										21	31
CV:C V	4	6	1								31	42
CV:C CV	3									2	15	20
CV:C VC	7				15				3		4	29
CCVC	2					3	3	3	23		13	47
CCVC CV	5										1	6
CCV: C	2	1			1			1	1		29	35
CCV: CV	22	1									34	57
CVC(:) VCi:V	2										3	5

Table III continued.

Singular	Plural:											Total
	CCA:CiC	CCVC	CCA:Ci	CiCA:n	CVC:A:C	CCuiCA	CCuCA:t	uCCCA	CCV:C	CACA:CiC	Other	
CCV								1			11	12
CVCCi:C			1								6	7
CV:C				11		3			30		9	53
(C)VCC						6	6	1	33		3	49
CVC:						1			14		3	18
OTHER			2		1				1			
TOTAL	162	26	13	11	17	13	9	7	115	11		

Table IV

Sing-ular	Plural: CVC:AC	CCi	CCA:Ci	(C)ACA:Ci	CCV:C	CV:CA	C:AC	VCV:C	CVCCA:n	CCA:CCA	CV:C	ACA:CCA	CVC:A	CVCCA	CCA:CA	CVCVC	-A:t	Other	Total
(C)VCCV		2		1														111	114
CVC:V																1		13	15
CVCCV:C										2	1	1						37	41
CV:CCV				1						1								18	20
CCV:C									1				2	3	2			27	35
CCV		1																11	12
CCi:V															1		2		3
CV:C						1												52	53
(C)VCC				2				1										46	49
CVC:							1											17	18
CV														1			1		2
CVCi:V			1														2		3
Ci:V			1																1
(C)VCVC:					1			1									1		3
CV:C:	1																		1
Other	16		11		114												332		
Total	17	3	13	4	115	1	1	2	1	3	1	1	2	4	3	1	338		

Table V

Singular	P l u r a l : i:n	A	A:t	Total
CCV:CVC	2			2
CVCVC:V	1			1
CVCVC:VC	3			3
CVCVCCVC	1			1
CVCCVC:VC	2			2
CCA:CCi		3		3
-3i		4		4
CV:C:V			4	4
CCVCV:C			3	3
CCVC:VC			1	1
CVCCVC:V			2	2
CVCVCV:CV			3	3
CVCV:CCV			2	2
CVCCCV:CV			1	1
CVC:VCVC:V			1	1
CVCVCCV			2	2
CVCVC:CV			2	2
CCVCCV:C			2	2
CVCCVCCVC			1	1
CCVCi:V			1	1
CVC:Ci:V			1	1
CVCCCi:V			1	1
CVC:i:V			2	2
CCVC:V			3	3
CVCCCV:C			2	2
CVCVCV			1	1
CVCVCCV			1	1

Table V continued.

Singular	Plural: i:n	Plural: A	A:t	Total
CVCVCV:C			3	3
Other	12	40	299	
Total	21	47	338	

Table VI

Singular	Plural: CCiC	CCAC	CCuC		CCu:C	CCA:C	Other	Total
(C)VCCV	6	4	5		5	2	92	114
CVC:V	1		2			3	8	15
CV:CV	2		4				36	42
CV:CVC					1	2	26	29
CCVC					5	18	24	47
CCV:C			1			1	33	35
CCV:CV			1				56	57
CV:C					8	22	23	53
(C)VCC					16	17	16	49
CVC:					12	2	4	18
Total	9	4	13 (26)		47	67 (114)		

2. Plural versus singular

As will be made clear by the statistics shown in the tables, the plural is generally not predictable from the singular. However, as will be shown below, some plural patterns are more likely than

others.

Let us take the (C)VCCV singular pattern as the first illustration. As is shown by tables II, III and IV, I had in total one hundred and fourteen examples of the (C)VCCV singular pattern. Out of these examples, seventy-six have an A:t-suffixed plural, one has an A-suffixed plural (Table II), three have a CCA:CiC plural pattern, nine a CCA:Ci pattern, fifteen a CCVC pattern, seven a CCV:C pattern (Table III) - the last two plural patterns can be further divided into three and two plural patterns respectively (Table VI)- two have a CCi pattern and one a CACA:Ci pattern (Table IV).

Let us now illustrate with concrete examples what has just been stated.

(C)VCCV singular		Plural	
ʃoʒro	'tree'	ʃaʒro:t	'trees'
badwi	'Bedouin'	badwi:a	'Bedouins'
rabṭa	'knot'	rba:yiṭ	'knots'
sabta	'belt'	sbit	'belts'
kaʃba	'piece'	kʃab	'pieces'
daʃra	'small village'	dʃur	'small villages'
qahwa	'cup of coffee, café'	qha:wi	'cups of coffee, cafés'
naʒma	'star'	nʒu:m	'stars'
naʕʒa	'female sheep'	nʕa:ʒ	'female sheep'
liḥya	'beard'	lḥi	'beards'
ibra	'needle'	aba:ri	'needles'

Let us now take a second illustration, the /CVC:V/ singular pattern. Out of fifteen examples, five have an /A:t/ suffixed plural, one

has an /i:n/ suffixed plural (Table II), two have a /CCA:CiC/ plural pattern, three a /CCVC/ plural pattern, three a /CCV:C/ plural pattern (Table III), and finally, one has a /CVCVC/ plural pattern (Table IV).

Examples:

CVC:V singular		Plural	
ʒan:a	'paradise'	ʒan:a:t	'paradises'
sin:a	'tooth'	sin:i:n	'teeth'
ʃif:a	'lip'	ʃfa:yif	'lips'
qub:a	'dome'	qbub	'domes'
quf:a	'basket'	qfa:f	'baskets'
qiṣ:a	'story'	qiṣaṣ	'stories'

3. Structure of the plural

The plural may be classified according to its structure. There are mainly two types of structure: suffixed structure and internal structure.

(a) Suffixed structure

Singular nouns may form their plural by the suffixation of any of the following plural suffixes: /A:t/, /i:n/ and /A/.

(i) A:t-suffixed plurals

These are, by far, the most common plural forms in the dialect. Indeed, out of eight hundred and eighteen singular nouns, three hundred and thirty-eight form their plural by the suffixation of /A:t/ (Tables II, IV and V). Out of one hundred and fourteen examples of the (C)VCCV singular pattern, seventy-six have A:t-suffixed plurals (Table II).

A few singular patterns, however, do not have an important number of examples which form their plurals in this way. For example, out of sixty singular nouns with a /CVC:V:C/ pattern, only eight nouns have A:t-suffixed plurals (Table II).

Some singular patterns which are only composed of a few examples each can, on the other hand, only form their plurals with an A:t suffix. (Table V).

/A:t/ is added after a singular noun in the following way:

ɑ:z	'cooker'	ɑ:z a:t	'cookers'
biskla:t	'bicycle'	biskla:t a:t	'bicycles'
bu:ntu	'point'	bu:ntu a:t	'points'
mɑ:s̤:u	'envelope'	mɑ:s̤:u a:t	'envelopes'
kɑrni	'notebook'	kɑrni a:t	'notebooks'

The final consonant of a CCVC singular pattern is geminated immediately before an /A:t/ suffix.

Examples:	qfɑs̤	'cage'	qfɑs̤: ɑ:t	'cages'
	mqɑs̤	'pair of scissors'	mqɑs̤: ɑ:t	'pairs of scissors'
	qlam	'pencil'	qlam: a:t	'pencils'

If a singular noun (other than one of a /CCA/ pattern) ends in (A), this (A) is deleted before an A:t suffix, following Rule (11) (Chapter III).

Examples:	t̥ɑy:ɑ:rɑ	'plane'	t̥ɑy:ɑ:r ɑ:t	'planes'
	bnay:a	'girl'	bnay: a:t	'girls'
	burdga:na	'orange'	burdga:n a:t	'oranges'
	briki:a	'lighter'	briki: a:t	'lighters'
	vi:sta	'jacket'	vi:st a:t	'jackets'

Notice that the last example has /vi:sita/ as its underlying form. Rule (11) (Chapter III), as well as the rule for final vowel deletion and metathesis (Rule (1), Chapter I) applies to it, to yield /vi:sta:t/:

*vi:sita a:t

*vi:sit a:t

vi:st a:t

/CCA/ stems behave in the following way: the final vowel is not deleted, and either /w/ or /y/ is inserted between the final vowel and the plural suffix, depending on the nature of the radical consonants. If the consonants are 'full' consonants, /w/ is inserted, but if either of them is /w/, /y/ is inserted.

Examples:	sma	'sky'	sma w a:t	'skies'
	ɣṭa	'cover'	ɣṭa w a:t	'covers'
	dwa	'medecine'	dwa y a:t	'medicines'
	wba	'epidemic'	wba y a:t	'epidemics'

If the second consonant is /y/ (and here only one example that will form its plural by the suffixation of /A:t/, is available), the plural has an altogether different structure. Indeed, as I showed in Section IV above, /mya/ 'hundred' forms its plural in the following way: mya *mya a:t mi a:t

/sinima/ [sinimá] 'cinema', which does not fit into the normal stress pattern of the dialect, due to being a loan word, behaves in a similar way to /CCA/ stems. This may be because, like /CCA/ stems, the stress in /sinima/ is on the final /a/:

sinima	'cinema'	sinima w a:t	'cinemas'

/xu/ 'brother' has /xua:t/ (pronounced [xwá:t]) as its plural.

Usually /xua:t/ is used interchangeably for 'brothers' and 'sisters', but in some idiolects, /xua:t/ is used for 'sisters' and /ɑxwa/ for 'brothers'.

Finally, /bu/ 'father' forms its plural in the following way: the single consonant is geminated, the single vowel deleted and the plural suffix added: /bu/ /b: a:t/ 'fathers'. There seems to be a tendency for nouns (although it is not very general) whose first consonant is bilabial, to geminate the bilabial before a long (A).

Examples: m:a:ʕin 'dishes'

m:a:s 'knives'

b:ɑ:bir 'ships'

(ii) <u>i:n-suffixed plurals</u>

Out of eight hundred and eighteen singular nouns, only twenty-two form their plural by the suffixation of /i:n/. Out of twenty-five nouns of the /CVCV:C/ singular pattern, for example, only one has an i:n-suffixed plural (Table II). Out of sixty nouns in the /CVC:V:C/ pattern, three have i:n-suffixed plurals (Table II). Several singular patterns do not have any corresponding i:n-suffixed plurals (Table II). Some singular patterns, on the other hand, each composed of only a few examples, can only form /i:n/-suffixed plurals (Table V).

/i:n/ is suffixed to some singular nouns in the following way:

mudi:r	'headmaster'	mudi:r i:n	'headmasters'
fan:a:n	'artist'	fan:a:n i:n	'artists'
muʃal:im	'teacher'	muʃal:m i:n	'teachers'
muhandis	'engineer'	muhands i:n	'engineers'
muðun:i	'singer'	muðun: i:n	'singers'
sin:a	'tooth'	sin: i:n	'teeth'
[illegible]	'ear'	[illegible] i:n	'ears'

Notice that Rule (1) (Chapter I) accounts for the structures of /muʕal:mi:n/, and /muhandsi:n/ and /wiðni:n/. Similarly, Rule (11) (Chapter III) accounts for the structures of /muðun:i:n/ and /sin:i:n/. The plural of /yid:/ 'hand' is not the expected */yid: i:n/ but /ydi:n/.

(iii) A-suffixed plurals

Out of eight hundred and eighteen singular nouns, forty-seven form their plural by the suffixation of (A). Thirty-four out of the forty-seven examples belong to a single singular pattern: CVC:V:C (Table II). The remaining examples are shared by eight different singular patterns. Finally, two singular patterns can only have A-suffixed plurals. They are /CCA:CCi/ and the pattern including /ʒi/-final nouns (Table V).

(A) can only be suffixed to singular nouns ending either in a consonant or an /i/ vowel.

Examples:	ʒaz:a:r	'butcher'	ʒaz:a:r a	'butchers'
	dzi:ri	'Algerian'	dzi:ri: a	'Algerians'
	sbaːbti	'shoe repairer'	sbaːbti: a	'shoe repairers'
	firmli	'male nurse'	firmli: a	'male nurse'
	bustaːʒi	'postman'	bustaːʒi: a	'postmen'

Notice that the above structures of the plural nouns are also the structures of the corresponding nouns in the feminine of the singular. The plural of /buli:s/ 'policeman' is not the expected */buli:sa/ (which incidentally is the 'female' counterpart of /buli:s/) , but /buli:si:a/. This may be because the underlying form of /buli:s/ is expected to be /buli:si/ by analogy with /muña:mi/, /muðun:i/ etc.

The examples belonging to the /CVC:V:CA/ plural pattern are names of occupations and professions. Indeed, those singular nouns of the /CVC:V:C/ pattern which are names of occupations form their plural by the suffixation of (A).

Examples:	ħaʒ:a:m	a	'hairdressers'		
	xay:a:ṭ	a	'tailors'		
	ṭob:a:x	a	'cooks'		
	ʃaṭ:a:ħ	a	'dancers'		

Notice, in this context, that the two homonymous singular nouns /xol:a:ṣ/ 'conductor' and /xol:a:ṣ/'comb' have different plurals:

xol:a:ṣ	'conductor'	xol:a:ṣ	a	'conductors'
xol:a:ṣ	'comb'	xla:liṣ		'combs'

Some A-suffixed plurals are in free variation with i:n-suffixed plurals.

Example:	muħa:mi:a	=	muħa:mi:n		'lawyers'

(b) Internal structure

(A) CCA:CiC plural pattern

This, after the A:t-suffixed plural, is the most common plural pattern in the dialect. Indeed, as shown by Table III, out of eight hundred and eighteen singular nouns, one hundred and sixty-two have a /CCA:CiC/ plural pattern.

Table III also shows that some singular patterns are more likely to have a /CCA:CiC/ plural form than others. For example, only three nouns out of one hundred and fourteen with the /(C)VCCV/ singular pattern have a /CCA:CiC/ plural form. In contrast, as many as twelve out of eighteen nouns of the /CVCCVC/ pattern have a /CCA:CiC/ plural form.

When a singular noun has two consonants, the second and third consonant slots of the /CCA:CiC/ plural pattern are filled by semi-vowels: /w/ and /y/ respectively. When, on the other hand, a singular noun has three consonants, either the second consonant or the third of the /CCA:CiC/ plural pattern (depending on the nature of the singular pattern) is filled by a semi-vowel: /w/ if it is the second consonant and /y/ if it is the third.

Table VII

Relevant Table	Singular Structure	No. of Singulars	No. with CCA:CiC plural	Examples: Singular	Plural	Comments
III	(C)V CCV	114	3	rukba 'knee'	rka:yib	Plural of /ʃafra/ 'eye-lash' is not */ʃfa:yir/ but /ʃwa:fir/.
				buqʕa 'place'	bqa:yiʕ	
III	CVC: V	15	2	ʃif:a 'lip'	ʃfa:yif	2nd and 4th consonant slots of plural are filled by geminated consonant of singular.
				ʒib:a 'traditional outfit'	ʒba:yib	
III	CVCV :C	25	10	ħanu:t 'shop'	ħwa:nit	Initial bilabial consonant geminates in plural: babu:r 'ship' b:a:bir, maʕu:n 'dish' m:a:ʕin.
				gitu:n 'tent'	gwa:tin	
III	CVCC VC	18	12	madfaʕ 'cannon'	mda:faʕ	/mka:tib/ is plural for both /maktib/ 'school' and /maktu:b/ 'pocket'.
				θaʕlib 'fox'	θʕa:lib	
III	CVCV :CV	20	2	siga:ru 'cigarette'	swa:gir	
				taħu:na 'mill'	twa:hin	
III	CVCC V:C	41	31	finʒa:l 'cup'	fna:ʒil	
				sandu:q 'box'	sna:diq	
III	CVCC V:CV	23	13	fargi:ṭa 'fork'	fra:git	
				kalsi:ṭa 'sock'	kla:sit	

Table VII continued.

Relevant Table	Singular Structure	No. of Singulars	No. with CCA:CiC plural	Examples: Singular	Plural	Comments
III	CVCC CV	23	17	korhba 'car' tiskro 'ticket'	kra:hib tsa:kir	
III	CVC: V:C	60	15	ɗab:u:t 'armpit' ɖat:u:s 'cat'	ɗba:bit ɖta:tis	
III	CVC: V:CV	31	10	dab:u:za 'bottle' sik:i:na 'knife'	dba:biz ska:kin	
III	CV:C V	42	4	sa:ʕa 'hour' ɦa:ʒa 'thing'	swa:yiʕ ɦwa:yiʒ	
III	CV:C CV	20	3	ta:wla 'table' ṅu:mru 'number'	twa:wil ṅwa:mir	
III	CV:C VC	29	7	ɦa:ʒib 'eyebrow' xa:tim 'ring'	ɦwa:ʒib xwa:tim	
III	CCVC	47	2	sbuʕ 'finger' ɖfar 'nail'	swa:biʕ ɖwa:fir	
III	CCVC CV	6	5	mɦarma 'handkerchief' mɣarfa 'spoon'	mɦa:rim mɣa:rif	
III	CCV: C	35	2	bhi:m 'donkey'	bha:yim	
III	CCV: CV	57	22	flu:ka 'boat' dqi:qa 'minute'	fla:yik dqa:yiq	
III	CVC(:) VCi:V	5	2	bat:ani:a 'blanket' qaʃ:abi:a 'traditional coat'	bta:tin qʃa:ʃib	

Some CCA:CiC plural nouns do not have singular equivalents.

Examples: ɦwa:yiʒ 'clothes'

ʃla:ɣim 'moustache'

(B) CCVC plural pattern

Out of eight hundred and eighteen nouns, twenty-six have a CCVC plural pattern (Table III). As is shown in Table VI, these twenty-six nouns can further be divided into three different plural patterns: CCiC, CCAC and CCuC.

Table VIII

Relevant Table	Singular Structure	No. of Singulars	No. with plural: CC iC	CC AC	CC uC	Examples: Singular	Plural	Comment
VI	(C)V CCV	114	6	4	5	filsa 'button'	flis	Generally if 1st vowel of singular is /i/, plural is CCiC. If it is /u/, plural is CCuC,*but this is not always true:
						sonba 'statue'	snob	
						ɲufra 'hole'	ɲfur	
						sabta 'belt'	sbit	
						daʃra 'hamlet'	dʃur	
VI	CVC: V	15	1		2	sik:a 'rail'	skik	Second and third consonant slots of plural are filled by the geminated consonant of singular.
						qub:a 'dome'	qbub	
VI	CV:C V	42	2		4	ku:ʃa 'bakery'	kwiʃ	Second consonant slot of plural is filled by /w/, if first vowel of singular is /u/, by /y/ if it is /i/.
						ʃi:ta 'brush'	ʃyit	
						ku:ɲa 'ball'	kwuɲ	
VI	CCV: C	35			1	kta:b 'book'	ktub	
VI	CCV: CV	57			1	mdi:na 'town'	mdun	

(C) CCA:Ci plural pattern

Out of eight hundred and eighteen nouns, thirteen have a CCA:Ci plural pattern (Tables III and IV).

* if it is (A), plural is CCAC.

Table IX

Relevant Table	Singular Structure	No. of Singulars	No. with CCA:Ci plural	Examples: Singular	Plural	Comment
III	(C)V CCV	114	9	kursi 'chair'	kra:si	
				kiswa 'suit'	ksa:wi	
III	CVCC i:V	7	1	zorbi:a 'carp- et'	zra:bi	
III	CV:C V	42	1	li:la 'night'	lya:li	
IV	CVCi :V	3	1	suri:a 'shirt'	swa:ri	
IV	Ci:V	1	1	ri:a 'kidney'	rwa:ri	Notice that /r/ is geminated in order to make up three consonants.

(D) CiCA:n plural pattern

Out of eight hundred and eighteen nouns, eleven have a CiCA:n plural pattern (Table III). A single singular pattern (CV:C) includes the eleven instances. Indeed, out of fifty-three examples of the CV:C singular pattern, eleven have a CiCA:n plural pattern.

The long vowel in CiCA:n is /a/ unless the consonant preceding it is emphatic or uvular, in which case it is /ɑ/. (No examples where the consonant is emphatic are available).

Examples:				
	ka:s	'glass'	kisa:n	'glasses'
	ba:b	'door'	biba:n	'doors'
	fɑ:r	'mouse'	fira:n	'mice'
	tɑ:q	'floor'	tiqɑ:n	'floors'

ʒoːr 'neighbour' ʒiraːn 'neighbours'

θuːr 'bull' θiraːn 'bulls'

(E) CVC:A:C plural pattern

Out of eight hundred and eighteen nouns, seventeen have a CVC:A:C plural pattern (Tables III and IV). Generally, they are names of occupations or profession or status.

Table X

Relevant Table	Singular Structure	No. of Singulars	No. with CVC:A:C plural	Examples: Single	Plural	Comment
III	CV:C VC	29	15	taːʒir 'merchant'	tuʒːoːr	Middle consonant of singular is geminated and first vowel is replaced by /u/ (with at least one exception: ʃaːyib 'old man' ʃiyːaːb). In saːyiħ 'tourist' suwːaːħ, /y/ is changed to /w/ due to the influence of the /u/ vowel.
				ħaːkim 'judge'	ħukːaːm	
				saːriq 'thief'	surːaːq	
III	CCV:C	35	1	xdiːm 'manservant'	xudːaːm	Middle consonant is geminated and /u/ is inserted between it and first consonant.
IV	CV:C:	1	1	ħaːʒ 'pilgrim'	ħuʒːaːʒ	The geminated consonant of the singular is reduplicated in order to fill the final consonant slot of the plural pattern.

(F) CCu:CA plural pattern

Out of eight hundred and eighteen nouns, thirteen have a CCu:CA plural

pattern (Table III). Apart from two examples (ie. /fru:da/ 'pistols' and /ʃmu:sa/ 'suns') the rest of the CCu:CA plural nouns are names of animals.

Table XI

Relevant Table	Singular Structure	No. of Singulars	No. with CCu:CA plural	Examples: Singular	Plural	Comment
III	CCVC	47	3	ħnaʃ 'snake'	ħnu:ʃa	
				bɣol 'mule'	bɣu:la	
III	CV:C	53	3	fi:l 'elephant'	fyu:la	The second consonant slot of the plural pattern is filled by /y/.
				si:d 'lion'	syu:da	
III	CVCC	49	6	qird 'monkey'	qru:da	
				nimr 'tiger'	nmu:ra	
III	CVC:	18	1	dib: 'bear'	dbu:ba	The second and final consonant slots of the plural pattern are filled by the geminated consonant of the singular pattern.

(G) CCuCA:t plural pattern

Out of eight hundred and eighteen nouns, nine have a CCuCA:t plural pattern (Table III).

Table XII

Relevant Table	Singular Structure	No. of Singulars	No. with CCuC A:t plural	Examples: Singular	Plural	Comment
III	CCVC	47	3	sqaf 'ceiling'	squfa:t	
				qbar 'grave'	qburo:t	
III	CVCC	49	6	ħarb 'war'	ħruba:t	
				ħabs 'prison'	ħbusa:t	

(H) uCCCA plural pattern

Out of eight hundred and eighteen nouns, seven have a uCCCA plural pattern (Table III).

Table XIII

Relevant Table	Singular Structure	No. of Singulars	No. with uCCA plural	Examples: Singular	Plural	Comment
III	CVCV :C	25	1	rosu:l 'God's messanger'	ursla	
III	CCVC	47	3	sħan 'plate'	ushna	
				ʃhar 'mouth'	uʃhra	
III	CCV:C	35	1	ħsa:n 'horse'	uħsna	
III	CCV	12	1	nβi 'prophet'	uñbya	The third consonant slot of the plural is filled by /y/.
III	CVCC	49	1	nahʒ 'street'	unhʒa	

(I) CCV:C plural pattern

Out of eight hundred and eighteen nouns, one hundred and fifteen have a /CCV:C/ plural pattern (Tables III and IV). These one hundred and fifteen nouns can further be divided into two different plural patterns (Table VI): /CCu:C/ and /CCA:C/.

(i) <u>(C)VCCV singular pattern</u>

Out of one hundred and fourteen examples, five have a /CCu:C/ plural pattern, and two have a /CCA:C/ plural pattern (Table VI).

Examples:	CCu:C	damʕa	'tear'	dmu:ʕ	'tears'
	CCA:C	maʕza	'goat'	mʕa:z	'goats'

(ii) <u>CVC:V singular pattern</u>

Out of fifteen examples, three have a /CCA:C/ plural pattern (Table VI). The second and final consonant slots of the plural pattern are filled by the geminated consonant of the singular pattern.

Example:	quf:a	'basket'	qfa:f	'baskets'	

(iii) <u>CV:CVC singular pattern</u>

Out of twenty-nine examples, one has a /CCu:C/ plural pattern and two have a /CCA:C/ plural pattern (Table VI).

Examples:	CCu:C	waːħid	'one, someone'	wħu:d	'some people'
	CCA:C	sa:ħib	'friend'	sħa:b	'friends'

(iv) <u>CCVC singular pattern</u>

Out of forty-seven examples, five have a /CCu:C/ plural pattern and eighteen a /CCA:C/ plural pattern (Table VI).

Examples:	CCu:C	qsar	'palace'	qsu:r	'palaces'
	CCA:C	wlid	'boy'	wla:d	'boys'

(v) <u>CCV:C singular pattern</u>

Out of thirty-five examples, one has a /CCA:C/ plural pattern (Table VI): ħbi:b 'dear friend' ħba:b 'dear friends'.

(vi) <u>CV:C singular pattern</u>

Out of fifty-three examples, eight have a /CCu:C/ plural pattern, and twenty-two a /CCA:C/ plural pattern (Table VI).

CCu:C plural pattern:

The second consonant slot of the plural pattern is filled by /y/.

Examples:	bi:t	'room'	byu:t	'rooms'
	rɑ:s̤	'head'	ryu:s̤	'heads'

CCA:C plural pattern:

The second consonant slot of the plural pattern is filled by /y/, if the vowel of the singular pattern is /i/, by /w/, if the vowel of the singular pattern is either /u/ or /A/.

Examples:	bi:r	'well'	byɑ:r	'wells'
	ð̤i:f	'guest'	ð̤ya:f	'guests'
	xɑ:l	'maternal uncle'	xwa:l	'maternal uncles'
	ɣu:l	'bogey'	ɣwa:l	'bogeys'

There is, however, at least one exception:

dɑ:r	'house'	*dwɑ:r
		dyɑ:r 'houses'

/ʕwa:m/, the plural of /ʕa:m/ 'year', is in free variation with /sni:n/. /mwa:s/, the plural of /mu:s/ 'knife', is in free variation with /m:a:s/.

(vii) (C)VCC singular pattern

Out of forty-nine examples, sixteen have a /CCu:C/ plural pattern, and seventeen a /CCA:C/ plural pattern (Table VI).

Examples:	CCu:C	qɑlb	'heart'	qlu:b 'hearts'
		wiʒh	'face'	wʒu:h 'faces'
	CCA:C	kalb	'dog'	kla:b 'dogs'
		qizm	'dwarf'	qza:m 'dwarves'
		muʃt̤	'comb'	mʃɑ:t̤ 'combs'

(viii) CVC: singular pattern

Out of eighteen examples, twelve have a /CCu:C/ plural pattern, and two a /CCA:C/ plural pattern (Table VI).

The second and final consonant slots of the plural pattern are filled by the geminated consonant of the singular pattern.

Examples:					
	CCu:C	ʃaṭ:	'beach'	ʃṭu:ṭ	'beaches'
		ʕiʃ:	'nest'	ʕʃu:ʃ	'nests'
	CCA:C	mux:	'brain'	mxa:x	'brains'
		sir:	'secret'	sra:r	'secrets'

(ix) <u>(C)VCVC: singular pattern</u>

Out of three examples, one has a /CCu:C/ plural pattern (Table IV). The geminated consonant loses its gemination in the plural:

malak: 'king' mlu:k 'kings'

(J) <u>(C)ACA:CiC plural pattern</u>

Out of eight hundred and eighteen nouns, eleven have a CACA:CiC plural pattern (Table III).

<u>Table XIV</u>

Relevant Table	Singular Structure	No. of Singulars	No. with (C)ACA:CiC plural	Examples: Singular Plural	Comment
III	(C)VCCVC	18	5	mandir 'landscape' manaːdir arnib 'rabbit' araːnib	
III	(C)VCV:CV	20	2	xarita 'map' xaraːyit ʒaridа 'newspaper' ʒaraːyid	The penultimate consonant slot of plural is filled by /y/.
III	CVCCCV	23	2	muʃkla 'problem' maʃaːkil	
III	CV:CCV	20	2	ʕaːsma 'capital' ʕawaːsim faːyda 'use, benefit' fawaːyid	Second consonant slot of plural pattern is filled by /w/.

The remaining plural patterns in Table IV are not very common. I shall, consequently, give them a brief description.

(K) CCi plural pattern

(i) (C)VCCV singular pattern

Examples: liɦya 'beard' lɦi 'beards'

aʕma 'blind man' ʕmi 'blind men'

(ii) CCV singular pattern

Example : ʕsɑ 'stick' ʕsi 'sticks'

(L) (C)ACA:Ci plural pattern

(i) (C)VCCV singular pattern : ibrɑ 'needle' aba:ri 'needles'

(ii) CV:CCV singular pattern : the middle consonant slot of the plural pattern is filled by /w/; /y/ in the singular example is deleted: θa:nya 'second' θawa:ni 'seconds'.

(iii) (C)VCC singular pattern : ism 'name' asa:mi 'names'

ɑrð 'land' ɑrɑ:ði 'lands'

(M) Cu:CA plural pattern

Only one instance of this plural is available:

CV:C single pattern mi:t 'dead man' 'mu:ta 'dead men'

(N) C:A:C plural pattern

(i) CVC: singular pattern. The first consonant is geminated and the gemination of the last consonant is lost in the plural:

fum: 'mouth' f:a:m 'mouths'

(ii) CV:C singular pattern The first consonant is geminated in the plural: mu:s 'knife' m:a:s 'knives'.

(O) VCV:C plural pattern

(i) (C)VCC singular pattern : alf 'thousand' alu:f 'thousands'

/alu:f/ is in free variation with /ala:f/.

(ii) (C)VCVC: singular pattern : amal: 'hope' ama:l 'hopes.

(P) CVCCA:n plural pattern

CCV:C singular pattern : bla:d 'town' bilda:n 'towns'.

(Q) CCA:CCA plural pattern

(i) CVCCV:C singular pattern : tilmi:ð 'pupil' tla:mða 'pupils'

ʕimla:q 'giant' ʕma:lqa 'giants'

(ii) CV:CCV singular pattern : the second consonant slot of the plural pattern is filled by /w/:

tu:nsi 'Tunisian' twa:nsa 'Tunisians'

(R) CV:C plural pattern

The only example is almost suppletive : insa:n 'person' na:s 'people'.

(S) ACA:CCA plural pattern

The only example is : usta:ð 'teacher' asa:tða 'teachers'.

(T) CVC:A plural pattern : the geminated consonant slot of the plural pattern is filled by the identical second and third consonants of the singular: tbi:b 'doctor' tub:a 'doctors'

sri:r 'bed' sir:a 'beds'

(U) (C)VCCA plural pattern

(i) CCV:C singular pattern : wti:l 'hotel' witla 'hotels'

mri:ḍ 'sick man' murḍa 'sick men'

(ii) CV singular pattern : xu 'brother' ɑxwa 'brothers'

(V) CCA:CA plural pattern

(i) CCV:C singular pattern : yti:m 'orphan' yta:ma 'orphans'

fqi:r 'pauper' fqɑ:ro 'paupers'

(ii) CCi:V singular pattern : hdi:a 'present' hda:ya 'presents'

In the last example, the final consonant slot of the plural pattern is filled by /y/.

(W) CVCVC plural pattern

The middle and final consonant slots of the plural pattern are filled by the geminated consonant of the singular pattern:

qis:o 'story' qisɑs 'stories'

Some nouns have suppletive plurals. They have not been included in the tables.

Examples: mrɑ 'woman' nsa 'women'

tufla 'girl' bna:t 'girls'

VI. RULES FOR THE NOUN

A. Explanation of the rules

Since A:t-suffixed plurals are the most common ones in the dialect, there will be no reference to them in particular lexemes. Indeed, whenever a lexeme does not include a reference to its plural, the latter would be an A:t-suffixed plural.

As for most of the remaining plural patterns, there will be a cross-reference in the lexemes concerned to their general phonological

structure. For example, the lexeme for /rukba/ 'knee' would show /rukba/, plural = X^1. X^1 means the CCA:CiC plural pattern, that is /rka:yib/ 'knees'. X^1, after A:t-suffixed plurals, would be the most important plural pattern in the dialect. X^2 would be the next most important pattern, and so on. Finally, some plural patterns will be given in full in the lexeme. These would include suppletive plurals and plurals which do not have singular equivalents.

B. Rules

Class (A) : noun

Number (A) : [S] singular or [D] dual or [P] plural

Form (A) : [S] X

or [D] X + Y, Y = /i:n/

or [P] X + W, W = /A:t/ (338 nouns)

or [P] X^1, X^1 = /CCA:CiC/ (162 nouns)

or [P] X^2, X^2 = /CCA:C/ (67 nouns)

or [P] X^3, X^3 = /CCu:C/ (47 nouns)

or [P] X + Y′, Y′ = /A/ (47 nouns)

or [P] X + Y, Y = /i:n/ (22 nouns)

or [P] X^4, X^4 = /CVC:A:C/ (17 nouns)

or [P] X^5, X^5 = /CCuC/ (13 nouns)

or [P] X^6, X^6 = /CCA:Ci/ (13 nouns)

or [P] X^7, X^7 = /CCu:CA/ (13 nouns)

or [P] X^8, X^8 = /CiCA:n/ (11 nouns)

or [P] X^9, X^9 = /CACA:CiC/ (11 nouns)

or [P] X^{10}, X^{10} = /CCuCA:t/ (9 nouns)

or [P] X^{11}, X^{11} = /CCiC/ (9nouns)

or [P] X^{12}, X^{12} = /uCCCA/ (7 nouns)

or [P] X^{13}, X^{13} = /CCAC/ (4 nouns)

CHAPTER V : MORPHOLOGY OF THE ADJECTIVE

Adjectives are inflected for gender (feminine), number (plural), comparative and superlative.

I. GENDER

A. Masculine

Uninflected adjectives are masculine singular. Two main types of adjectives are encountered:

1. Participial adjectives

As was mentioned in Chapter III, participles, whether real or historical, may function both as adjectives and nouns (F. Talmoudi, 1979).

Examples: mtðɑʃ:aʃ 'angry'
mrub:i 'bred'
miʃħa:ħ 'mean'
xɑ:yib 'ugly'

2. Other adjectives

These include any non-participial adjectives.

Examples: ðni 'rich'
twi:l 'tall'

The distinction between the two types of adjectives is not relevant to the morphology. Indeed, both are inflected in the same way. Several different structures are encountered. The most common ones are the following:

Table I

Total number of adjectives : 220

Patterns	Number with each pattern	E x a m p l e s		C o m m e n t
CA:CiC	54	ʕa:qil ra:qid	'nice' 'asleep'	
CCi:C	34	qsi:r nḍi:f bxi:l	'short' 'clean' 'lazy'	CCi:C adjectives usually denote size, quality or defect (Talmoudi, 1979).
ACCA(C)	17	ɑzrɑq ɑḍlam ɑħwal ɑslɑʕ	'blue' 'dark' 'cross-eyed' 'bald'	Usually these denote colour or infirmity (Cohen, 1975).
A:n-suffixed adjectives	10	ʒi:ʕa:n ʕotʃa:n ʕorqo:n fɑrħa:n	'hungry' 'thirsty' 'sweaty' 'happy'	Usually, they denote a physical or mental state. Some are in free variation with CA:CiC adjectives. eg. taʕba:n = ta:ʕib 'tired'.
CA:Ci	15	ba:hi ɣa:li	'good, nice' 'expensive'	
mCAC:AC	12	m:ɑs:ɑx mdɑw:ɑr	'dirty' 'round'	These are participial adjectives.
mACCu:C	10	mɑʃhu:r mahbu:l	'famous' 'crazy'	These are also participial adjectives.
i-suffixed adjectives	12	tu:nsi fu:qɑ:ni	'Tunisian' 'top'	
CAC:A:C	8	ħaʃ:a:m ɣɑʃa:ʃ	'shy' 'deceitful'	
CV:C	4	mi:t ḍi:q	'dead' 'narrow'	
mtCAC:AC	7	mtħɑq:ɑq mtɣɑʃ:ɑʃ	'certain' 'angry'	

The remaining adjective patterns are less common. There is no need to mention them in this section.

B. Feminine

Adjectives, like participles and some nouns, form their feminine by the suffixation of (A).

Examples:	smi:n	'fat'	smi:n a
	ʒi:ʕa:n	'hungry'	ʒi:ʕa:n a
	maʃhu:r	'famous'	maʃhu:r a
	sxu:n	'hot'	sxu:n a
	ħur:	'free'	ħur: ɑ
	ʃiṭɑ:n	'naughty'	ʃiṭɑ:n a
	bak:u:ʃ	'dumb'	bak:u:ʃ a
	taħfu:n	'cute'	taħfu:n a
	miski:n	'poor'	miski:n a
	mi:t	'dead'	mi:t a
	miðyɑ:r	'jealous'	miðyɑ:r ɑ
	haʃ:a:m	'shy'	haʃ:a:m a
	ħo:r:	'hot'(burning sensation)	ho:r: ɑ

The rule for final vowel deletion and metathesis (Rule (1), Chapter I) applies when relevant:

(i) Final vowel deletion

ʕɑ:ʃir	'tenth'	ʕɑ:ʃr ɑ
m:ɑṣ:ɑx	'dirty'	m:ɑṣ:x ɑ
mnarvaz	'angry'	mnarvz a
mtwaṣ:ɑṭ	'average'	mtwɑṣ:ṭ ɑ
ix:ir	'last'	ix:r ɑ
muxtur	'dangerous'	muxtr ɑ

The feminine of /a:xir/ 'other' is not the expected */a:xrɑ/ but /uxrɑ/. /mdal:al/'spoiled', /mtħɑq:ɑq/ 'certain', and similar examples (where the final consonant is the same as the preceding geminated consonant) behave in the following way:

mdal:al 'spoiled' /mdal:la/ [mdál:a]

mtħɑq:ɑq 'certain' /mtħɑq:qɑ/ [mᵊtħáq:ɑ]

mtðɑʃ:aʃ 'angry' /mtðɑʃ:ʃa/ [mᵊtðáʃ:a]

(ii) Metathesis

/ACCA(C)/ is the only pattern to which metathesis applies. Moreover, the following morphological rule also applies to it:

Rule (1) : Adjectives of the /ACCA(C)/ pattern lose their initial vowel in the feminine and in the plural.

Examples:	ɑħmɑr	'red'	*ħmɑr ɑ	ħamr ɑ
	ɑṭrɑʃ	'deaf'	*ṭrɑʃ a	ṭarʃ a

If the second consonant of the feminine of an /ACCA(C)/ adjective is a semi-vowel, the vowel immediately preceding the semi-vowel is assimilated to it in the following way : /Ay/ is changed to /iy/ and /Aw/ is changed to /uw/.

Examples:	ɑbyɑḍ	'white'	*byɑḍ ɑ	*bayḍ ɑ	biyḍ ɑ
	aħwal	'cross-eyed'	*ħwal a	*ħawl a	ħuwl a

/aʕma/ 'blind' , since it has only two consonants, behaves in the following way when it is inflected for the feminine: /y/ is added after the stem, before the rule for metathesis is allowed to apply:

aʕmɑ	'blind'	*aʕmay	*ʕmay a	ʕamy a

The rule for vowel-lengthening (Rule(2), Chapter I) applies when relevant.

Examples:	qwi	'strong'	qwi: a
	ɦlu	'sweet'	ɦlu: a
	mirxi	'loose'	mirxi: a

The morphological rule stated in Chapter III (Rule (10)) applies when relevant.

Examples:	ba:hi	'nice, good'	*ba:hi a	ba:hy a
	ʒa:yi	'next'	*ʒa:yi a	ʒa:y: a
	mʕib:i	'full'	*mʕib:i a	mʕib:y a
	mtrub:i	'well-behaved'	*mtrub:i a	mtrub:y a

Some uninflected adjectives are in the feminine. Their masculine counterparts are either suppletive or do not exist.

Examples:	ħibla	'pregnant
	ʕzu:za	'old (of a female)'

The masculine counterpart of /ʕzu:za/ is /ʃa:yib/, but in some idiolects /ʕzu:z/ is also encountered.

Finally, some adjectives cannot be inflected either for gender or number.

Examples:	qostli	'maroon' (colour)
	wordi	'pink'
	kul:	'every'
	ħmu:m	'bad'

II. NUMBER

Adjectives, unlike nouns,are not inflected for dual. The plural is used instead.

As in the case of nouns, the structure of the plural is generally not predictable from that of the singular. It will, however, be demonstrated that some plural patterns are more likely than others.

A. Structure of the plural

Like nouns, there are two main types of structure: suffixed structure and internal structure.

1. Suffixed structure

Two types of plural suffixes may be added after a singular adjective: /i:n/ and /A/ (Table II).

Table II

Pattern	-i:n	-A	Other	Total
CA:CiC	52		2	54
CA:Ci	15			15
mACCu:C	9		1	10
miCCA:C	4			4
mCAC:AC	12			12
mCACCAC	2			2
mtCAC:AC	7			7
CVC:	3		1	4
(C)VC:VC	1			1
mCVC:i	3			3
mtCVC:i	1			1
mVCCV(C)	4			4
CV:C	3		1	4

Table II continued.

Pattern	-i:n	-A	Other	Total
CCV	4		1	5
CAC:A:C	8			8
CV:C:	1			1
... i	7	2	3	12
CVCA:C	1		2	3
...A:n	5		5	10
CCu:C	1		1	2
TOTAL	143	2		

NB. I have not included in the tables the adjectives that cannot be inflected.

(a) i:n-suffixed adjectives

These are, by far, the most common in the dialect. Indeed, as is shown by Table II, out of two hundred and twenty plural adjectives, one hundred and forty-three have an /i:n/ suffix.

Generally, most examples belonging to the singular patterns on Table II form their plural by the suffixation of /i:n/. For example, almost one hundred per cent of the adjectives with /CA:CiC/ singular pattern form their plural by the suffixation of /i:n/. One hundred per cent of the adjectives with /CA:Ci/, /miCCA:C/, /mCAC:AC/ etc. patterns do (see table). /i:n/ is suffixed to singular adjectives in the following way:

(i) CA:CiC singular pattern

Rule (1) (Chapter I) applies to the examples from this pattern, as a result of the suffixation of /i:n/.

Examples:	ʃa:yiħ	'dry'	ʃa:yħ i:n
	sa:hil	'easy'	sa:hl i:n
	fa:rið	'empty'	fa:rð i:n
	ʃa:yib	'grey' (of hair)	ʃa:yb i:n

The plural of /a:xir/ 'other' is not */a:xri:n/ but /uxri:n/.

(ii) CA:Ci singular pattern

Rule (11) (Chapter III) applies to the examples from this pattern.

Examples:	ba:hi	'good, nice'	ba:h i:n
	ʕa:li	'high'	ʕa:l i:n

(iii) mACCu:C singular pattern

Example:	maʃhu:r	'famous'	maʃhu:r i:n

(iv) miCCA:C singular pattern

Example:	mizya:n	'handsome'	mizya:n i:n

(v) mCAC:AC singular pattern

Rule (1) (Chapter I) applies to this pattern also, and to the three following patterns ((vi), (vii) and (viii)).

Example:	mðah:ab	'golden'	mðah:b i:n

(vi) mCACCAC singular pattern

Example:	mnarvaz	'angry'	mnarvz i:n

(vii) mtCAC:AC singular pattern

Example:	mtħaq:aq	'certain'	mtħaq:q i:n

(viii) (C)VC:VC singular pattern

The only example of this pattern is : ixxir 'last' ixxr i:n

(ix) CVC: singular pattern

Example: nay: 'raw' nay: i:n

(x) mCVC:i singular pattern

Rule (11) (Chapter III) applies to the examples of this pattern.

Example: mʕib:i 'full' mʕib: i:n

Similarly, it applies to the examples of the following pattern ((xi)).

(xi) mtCVC:i singular pattern

Example: mtrub:i 'well-behaved' mtrub: i:n

(xii) mVCCV(C) singular pattern

Rule (1) (Chapter I) applies to examples from this pattern which end in a consonant, while rule (12c) (Chapter III) applies to examples which end in a vowel.

Examples: muxtur 'dangerous' muxtr i:n

mirxi 'loose' mirxy i:n

(xiii) CV:C singular pattern

Example: ðˌi:q 'narrow' ðˌi:q i:n

(xiv) CCV singular pattern

Rule (12b) (Chapter III) applies to this pattern.

Examples: ðki 'intelligent' ðky i:n

ɦlu 'sweet' ɦlw i:n

(xv) CAC:A:C singular pattern

Example: haʃ:a:m 'shy' haʃ:a:m i:n

(xvi) CV:C: singular pattern

The sole example is : ho:r: 'hot'(burning sensation) ho:r: i:n

(xvii) i-suffixed adjectives

Example: mor:u:ki 'Moroccan' mor:u:k i:n

Notice that rule (11) (Chapter III) applies to this pattern.

(xviii) CVCA:C singular pattern

The only example is : sufa:ʒ 'savage' sufa:ʒ i:n

(xix) A:n-suffixed adjectives

Example: farħa:n 'happy' farħa:n i:n

(xx) CCu:C singular pattern

The sole example is : mʃu:m 'bad, ugly' mʃu:m i:n

(b) A-suffixed adjectives

Adjectives that form their plural by the suffixation of (A) are not very common (Table II).

(i) i-suffixed adjectives

Some of these form their plural by the suffixation of (A).

Example: dzi:ri 'Algerian' dzi:ri: a

Notice that the rule for vowel lengthening (Rule (2), Chapter I) applies to the above example.

(ii) CAC:A:C singular pattern

This pattern was described above, under 'i:n-suffixed adjectives'. The examples of this pattern that can form their plural by the suffixation of /i:n/ can also do it by the suffixation of /A/.

Example: ħaʃ:a:m i:n = haʃ:a:m a 'shy' (plural)

2. Internal structure

Table III

	Plural:													
Singular	CCA:C	CuCCA	CCA:CiC	CCuC	CCAC	CCA:CA	CCi	CuCCA:n	CCAC:CA	CVC:A:C	Cu:CA	CCA:CCA	Other	Total
CCi:C	29	1		2		2								34
CCu:C	1												1	2
CVCCu:n	1													1
CVC:	1												3	4
CCV		1											4	5
CVCA:C			1					1					1	3
CVC:u:C			2											2
CCV:CV			1											1
CVCCV:C			1									1		2
ACCA(C)				16			1							17
CVCCV						1								1
-A:n						5							5	10
mACCu:C									1				9	10
CA:CiC										2			52	54
CV:C											1		3	4
-i					1							2	9	12
TOTAL	32	2	5	18	1	8	1	1	1	2	1	3		

(a) CCA:C plural pattern

As is shown by Table III, this is the second most important plural pattern.

(i) CCi:C singular pattern

Twenty-nine, out of thirty-four examples of this pattern, have a /CCA:C/ plural pattern. The latter may be said to be the normal plural pattern of /CCi:C/ adjectives. The remaining examples which belong to the /CCi:C/ singular pattern (that is those which have different plurals) may be included in the lexicon, together with their respective plurals.

Examples:	xfi:f	'light'	xfa:f
	sḥi:ḥ	'strong'	sḥa:ḥ
	ðʕi:f	'slim'	ðʕa:f

(ii) CCu:C singular pattern

Examples are so rare (Table III) that generalizations do not seem possible. This, and other similar rare patterns shown in Table III, are included in the lexicon.

Example:	sxu:n	'hot'	sxa:n

(iii) CVCCu:n singular pattern

/n/ is deleted in the plural : taḥfu:n 'cute' tḥa:f

(iv) CVC: singular pattern

Out of four examples, one has a /CCA:C/ plural. The second and final consonant slots of the plural pattern are filled by the geminated consonant of the singular:

ḥur:	'free'	ḥra:r

(b) CuCCA plural pattern

This pattern is rare (Table III).

(i) CCi:C singular pattern : mri:ð 'ill' murða

(ii) CCV singular pattern

The final consonant slot of the plural pattern is filled by /y/ :

ðni 'rich' ðunya

(c) CCA:CiC plural pattern

(i) CVCA:C singular pattern

The second consonant slot of the plural pattern is filled by /w/:

ʃitaːn 'naughty' ʃwaːtin

(ii) CVC:u:C singular pattern

The second and third consonant slots of the plural pattern are filled by the geminated consonant of the singular.

Example: bak:uːʃ 'dumb' bkaːkiʃ

(iii) CCV:CV singular pattern

The third consonant slot of the plural pattern is filled by /y/:

ʕzuːza 'old' (female) ʕzaːyiz

(iv) CVCCV:C singular pattern : miskiːn 'poor' msaːkin.

(d) CCuC plural pattern

This corresponds to two singular patterns:

(i) CCi:C

Two out of thirty-four examples have a /CCuC/ plural.

Example: ʒdiːd 'new' ʒdud

(ii) ACCA(C)

Sixteen out of seventeen examples have a /CCuC/ plural. In fact, the one example that does not, is the one without a final consonant (ie. /aʕma/ 'blind').

Examples: ɑbyɑḍ 'white' byuḍ

ɑzrɑq 'blue' zruq

(e) CCAC plural pattern

Only one example is available : ʕarbi 'Arabian' ʕrab

(f) CCA:CA plural pattern

(i) CCi:C singular pattern

Example: fqi:r 'poor' fqa:ra

(ii) CVCCV singular pattern : ħibla 'pregnant' ħba:la

(iii) A:n-suffixed adjectives

The second consonant slot of the plural pattern is filled by /w/, if the singular has two consonants only (excluding the final /n/).

Examples: ʃibʕa:n 'not hungry' ʃba:ʕa

ʕirya:n 'naked' ʕra:ya

ʒi:ʕa:n 'hungry' ʒwa:ʕa

All of the above plurals (ie. plurals of A:n-suffixed adjectives) are in free variation with /i:n/-suffixed plurals.

Examples: ʕaṭʃa:n 'thirsty' ʕṭa:ʃa = ʕaṭʃa:n i:n

ħifya:n 'bare-footed' ħfa:ya = ħifya:n i:n

(g) CCi plural pattern

The only adjective with this plural is the one responsible for the optional consonant in /ACCA(C)/ singular pattern :

aʕma 'blind' ʕmi

(h) CuCCA:n plural pattern

Only one example is available : ʃuʒa:ʕ 'courageous' ʃuʒʕa:n

(i) CCAC:CA plural pattern

Similarly, only one example is available. The third consonant of the singular is geminated in the plural: mahbu:l 'crazy' mhab:la.

(j) CVC:A:C plural pattern

The middle consonant of the singular is geminated in the plural.

ʒa:hil 'ignorant' ʒuh:a:l

ʃa:yib 'old' (male) ʃiy:a:b

Notice that the plural of /ʃa:yib/ 'grey' (of hair) is /ʃa:ybi:n/.

Example: ʃaʕra:t ʃa:ybi:n 'a few grey hairs'

(k) Cu:CA plural pattern

The only example with this plural belongs to the /CV:C/ singular pattern : mi:t 'dead' mu:ta.

(l) CCA:CCA plural pattern

(i) CVCCV:C singular pattern : ʕimla:q 'giant' ʕma:lqa.

(ii) i-suffixed adjectives : tu:nsi 'Tunisian' twa:nsa

maɣrbi 'Moroccan' mɣa:rba

Notice that when the adjective has only three consonants (as in /tu:nsi/), the second consonant slot of the plural pattern is filled by /w/.

B. Rules

1. Explanation of the rules

Since the most common plurals are the ones with an /i:n/ suffix, there will be no reference made to them in particular lexemes. As for the remaining plurals, there will be a cross-reference in the lexemes concerned to their general phonological structure.

Whenever a particular plural pattern is the plural of most of the examples of a particular singular pattern, it is mentioned in the rules as being the plural of that singular pattern. The rest of the examples belonging to the same singular pattern, but which have different plurals, and plural patterns which are rare, are listed separately in the lexicon.

2. Rules

Class (A) : adjective

Number (A) : [S] singular or [P] plural

Form (A) : [S] X & [P] X + Y, Y = /i:n/ (143 adjectives)

or [S] X^1, X^1 : CCi:C & [P] X^2, X^2 : CCA:C (32 adjectives)

or [S] X^3, X^3 : ACCAC & [P] X^4, X^4 : CCuC (18 adjectives)

or [P] X^5, X^5 : CCA:CA (8 adjectives)

or [P] X^6, X^6 : CCA:CiC (5 adjectives)

or [P] X^7, X^7 : CCA:CCA (3 adjectives)

or [P] X^8, X^8 : CuCCA (2 adjectives)

or [P] X^9, X^9 : CVC:A:C (2 adjectives)

or [P] X + Y′, Y′ = /A/ (2 adjectives)

III. THE COMPARATIVE DEGREE

Two main types of comparatives may be distinguished: syntactic and inflectional.

1. Syntactic

By this, I mean those adjectives which, in order to express the comparative degree, have to be followed by a 'post-adjectival phrase (Talmoudi, 1979) : /ɑkθɑr/ 'more'. Generally, /ɑkθɑr/ forms the comparative degree of adjectives of more than three consonants.

Examples:	ʕimla:q	'giant'	ʕimla:q ɑkθɑr	'gianter'
	miski:n	'poor'	miski:n ɑkθɑr	'poorer'
	ħal:u:f	'naughty'	ħal:u:f ɑkθɑr	'naughtier'
	ħaʃ:a:m	'shy'	ħaʃ:a:m ɑkθɑr	'shyer'
	friʃk	'fresh'	friʃk ɑkθɑr	'fresher'

/ɑkθɑr/ also usually forms the comparative degree of m-prefixed adjectives.

Examples:	mðah:ab	'golden'	mðah:ab ɑkθɑr	'more golden'
	masmu:m	'poisonous'	masmu:m ɑkθɑr	'more poisonous'
	miðya:r	'jealous'	miðya:r ɑkθɑr	'more jealous'
	mnarvaz	'angry'	mnarvaz ɑkθɑr	'angrier'
	mtħaq:aq	'certain'	mtħaq:aq ɑkθɑr	'more certain'
	mʕib:i	'full'	mʕib:i ɑkθɑr	'fuller'
	mtrub:i	'well-behaved'	mtrub:i ɑkθɑr	'better-behaved'
	mirxi	'loose'	mirxi ɑkθɑr	'looser'

/muxṭur/ 'dangerous' has an inflectional comparative : /ɑxṭɑr/.

This may be because /muxṭur/ has a synonym without an /m/ prefix : /xṭi:r/.

Finally, /ɑkθɑr/ forms the comparative degree of i-suffixed adjectives.

Examples:	ʕɑrbi	'Arabian'	ʕɑrbi ɑkθɑr	'more Arabian'
	tu:nsi	'Tunisian'	tu:nsi ɑkθɑr	'more Tunisian'
	wɑrdi	'pink'	wɑrdi ɑkθɑr	'pinker'

/ɑkθɑr/ may or may not be followed by /min/ 'than'.

The opposite of /ɑkθɑr/ is /ɑqɑl:/ 'less'.

As will be shown below, under 'Inflectional', there are exceptions to the above generalizations.

2. Inflectional comparative

Some adjectives are inflected for the comparative degree. Three main patterns of comparatives are encountered.

(a) ACCAC pattern

Generally, tri-consonantal adjectives, where the ultimate and penultimate consonants are distinct, have this comparative pattern.

Examples:	qṣi:r	'short'	ɑqṣɑr	'shorter'
	smi:n	'fat'	asmɑn	'fatter'
	wa:siʕ	'wide'	awsaʕ	'wider'
	xɑ:yib	'ugly'	ɑxyab	'uglier'
	sxu:n	'hot'	ɑsxɑn	'hotter'
	ʃiṭɑ:n	'naughty'	ɑʃṭɑn	'naughtier'

Bi-consonantal adjectives of the pattern /(C)V:C/ behave in the following way: the second consonant slot of the comparative pattern is filled by /w/ or /y/ depending on the quality of the vowel in the adjective. (Only Ci:C adjectives are available, however, the fact can be established by means of nonsense words).

Examples:	ḍi:q	'narrow'	ɑḍyɑq	'narrower'
	ʒi:d	'thin'	aʒyad	'thinner'

/mi:t/ 'dead' does not have an inflectional comparative degree :

/mi:t ɑkθɔr/.

Adjectives ending in /A:n/ or /u:n/ (where the consonant immediately preceding /A:n/ or /u:n/ is a full consonant) form their comparative after deletion of the /A:n/ or /u:n/ element.

Examples:	ʕɑtʃa:n	'thirsty'	ɑʕtɑʃ	'thirstier'
	taħfu:n	'cute'	atħaf	'cuter'

In /ʒi:ʕa:n/ 'hungry', the second consonant slot of the comparative is filled by /w/ : /aʒwaʕ/ 'hungrier'.

ACCA(C) adjectives remain unchanged in the comparative.

Examples:	ɑbyɑð	'white'	ɑbyɑð	'whiter'
	ɑslɑʕ	'bald'	ɑslɑʕ	'balder'
	aʕma	'blind'	aʕma	'blinder'

Some m-prefixed adjectives which might be called exceptions, have an /ACCAC/ comparative pattern. The prefix disappears in the comparative.

Examples:	m:ɑs:ɑx	'dirty'	ɑmsɑx	'dirtier'
	mzɑw:ar	'clever'	ɑzwar	'more clever'
	mɑʃhu:r	'famous'	ɑʃhar	'more famous'
	mahbu:l	'crazy'	ahbal	'crazier'
	mizya:n	'handsome'	azyan	'more handsome'

Similarly, some adjectives of more than three consonants have an /ACCAC/ comparative pattern.

Examples:	bak:u:ʃ	'dumb'	abkaʃ	'dumber'
	ʕna:ydi	'stubborn'	ɑʕnad	'more stubborn'

(b) <u>ACAC: pattern</u>

Generally, tri-consonantal adjectives, where the ultimate and pen-

ultimate 'full' consonants are identical or geminated, have this pattern.

Examples:	bni:n	'savoury'	aban:	'more savoury'
	sħi:ħ	'strong, right'	asaħ:	'stronger, more correct'
	ħmu:m	'bad'	aħam:	'worse'
	ħa:r:	'hot' (burning sensation)	ahar:	'hotter'
	mur:	'bitter'	amar:	'more bitter'

/ħur:/ 'free' forms its comparative in the following way:

/ħur: akθar/ 'freer'

Some m-prefixed adjectives with identical ultimate and penultimate consonants have an /ACAC:/ comparative pattern.

Example: miʃħa:ħ 'mean' aʃaħ: 'meaner'

(c) ACCA pattern

Generally, bi-consonantal adjectives have this pattern.

Examples:	ðni	'rich'	aðna	'richer'
	ðki	'intelligent'	aðka	'more intelligent'
	ħlu	'sweet'	aħla	'sweeter'
	ðа:li	'expensive'	aðla	'more expensive'
	sо:fi	'clear'	asfa	'clearer'

Notice that /ba:hi/ 'nice, good' has a suppletive comparative :

xi:r 'better, nicer'.

Adjectives ending in /A:n/ or /u:n/ (where the consonant immediately preceding /A:n/ or /u:n/ is /y/) form their comparative after deletion of the /A:n/ or /u:n/ element, and the final /y/.

Examples:	malya:n	'full'	amla	'fuller'
	ʕiy:a:n	'tired'	aʕya	'more tired'

The above two examples and other similar examples are in free variation with 'syntactic' comparatives. Indeed, in some idiolects, the latter is more often used.

Examples: malya:n akθar 'more full'

ʕiy:a:n akθar 'more tired'

Tri-consonantal adjectives, where the two final consonants are geminated semi-vowels, have an /ACCA/ comparative pattern also. However, again, the comparative with /akθar/ is more often used.

Examples: ħay: 'alive' aħya = ħay:akθar 'more alive'

nay: 'raw' anya = nay: akθar 'rawer'

Comparatives are not inflected either for gender or for number.

Examples: hu:a ʔtwal min uxtu 'he is taller than his sister'

uxtu ʔtwal min:u 'his siter is taller than him'

hu:ma ʔðna min:a 'they are richer than us'

3. Rules

Class (A) : adjective

Degree (A) : [C] comparative or [P] positive

Form (Z) : [I] C1 + {∅ or V1} + {∅ or C2}, + V2 + C3 + {∅ or Y}

or [II] C1 + {∅ or V1} +C2 + {∅ or V2} + C3, C2 = C3

or [III] C1 + {∅ or V1} + C2 + V2

Form (A) : [C & I] V′ + C1 + C2 + V′ + C3, V′ = A

or [C & II] V′ + C1 + V′ + C2 + C3

or [C & III] V′ + C1 + C2 + V′

IV. THE SUPERLATIVE DEGREE

Comparative adjectives may have a superlative value. In this case,

the comparative is usually immediately followed by the noun which it qualifies.

Examples: bu:h ɑðna rɑ:ʒil filbla:d

'his father is the richest man in town'

hu:a oqwa wa:ħid

'he is the strongest'

ha:ðai aban: ma:kla kli:t ha

'this is the tastiest food I've ever eaten'

As may be seen from the examples, the noun following the superlative may or may not be followed by the preposition /fi/ 'in'.

CHAPTER VI : CLITICS

I. CRITERIA FOR CLITIC STATUS

A. Clitics versus inflectional affixes

Arnold M. Zwicky and Geoffrey K. Pullum (1981) postulated six criteria for distinguishing between three 'simple clitics' and three inflectional affixes in English. I shall start by applying those criteria to some possible clitics in order to show that they are not inflectional affixes.

Criterion (A) postulates that 'clitics exhibit a low degree of selection with respect ot their hosts...', that is, they 'can attach to words of virtually any category'.

Prepositions in the dialect can attach to several different categories. (In the examples, clitics are underlined).

Examples:

Noun	rʒaʔ min ɑlmɑ:nya	'he came back from Germany'
	[rʒáʔ mn ɑlmá:nya]	
Adverb	a:na ma:ʃi min hu:ni	'I am going this way'
	[á:na má:ʃi mᵊn hú:ni]	
Adjective	min sxu:n wal:a ba:rid	'it became cold after it had been hot'
	[mᵊn sxú:n wál:a bá:rid]	

Similarly, the conjunction /wa / 'and' can attach to different categories.

Examples:

Noun	rɑ:ʒil wa mrɑ	'a man and a woman'
	[rɑ́:ʒil wᵊmrɑ́]	

Verb yoqro wa yiktib 'he reads and writes'

[yóqro wyíktib]

Adverb hu:ni wa ðo:di 'here and there'

[hú:ni wðó:di]

Adjective hu:a kbi:r wa mri:ḍ 'he is old and sick'

[hú:a kbí:r wˀ mrí:ḍ]

The interrogative pronoun /a:ʃ/ can also attach to different categories.

Examples: /a:ʃ/ 'what'

Verb a:ʃ noʃmlu 'what shall we do?'

[ʃnóʃmlu]

Preposition a:ʃ bi:h 'what's the matter with him?'

[ʃbi:h]

Adjective a:ʃ xi:r min ha:ḍa 'what's better than this?'

[ʃxí:r mˀnhá:ḍa]

Similarly, personal pronouns can attach to verbs, preposions and other pronouns (including interrogative pronouns).

Examples:

Verb [fíhm ik mlí:ħ] 'he understood you well'

Preposition [fú:q ik ṣárf] 'do you have any change (on you)?

Pronoun [ʃá:fu bʕáḍhum lbá:riħ] 'yesterday they saw each other'

Interrogative pronoun [ʃkú:nu hḍá:ka] 'who is he?'

When suffixed to a noun, the personal pronoun has a genitive value.

Examples: kta:b ik 'your book'

ʒad: u 'his grandfather'

Notice that personal pronouns are not 'simple clitics', but, as we shall see later, belong to what Zwicky (1976) termed 'special clitics'.

Criterion (B) postulates that 'there are no arbitrary gaps in the set of host-clitic combinations'. Indeed, there is no noun, for example, which cannot be combined with the conjunction /wa/ or its clitic form [w].

Criterion (C) postulates that 'there are no morphonological idiosyncracies within clitic groups. Hosts are unaffected by these clitics, and the clitics themselves have allomorphs distrubuted by general rules'. In other words, there are no cases where a particular 'clitic group' shows an unexpected structure. This happens, however, with inflectional affixes. The plural, in the dialect, for example, is not always formed by the suffixation of /A:t/ but there are cases of internal change, suppletion, etc.

Criterion (D) postulates that 'there are no semantic idiosyncracies for clitic groups... no cases where the contribution of these clitics to sentence meaning is not identical to the contribution of their associated full forms'. The clitic group in the sentence [ʃə thib: táʕmal] 'what do you want to do', for example, has the same meaning as the non-clitic group in /a:ʃ thib: taʕmal/.

Criterion (E) postulates that 'syntactic rules... cannot affect clitic groups'. That is, a combination of a word and a clitic is not viewed as a 'unit', but as separate entities. [ktá:bi] 'my book', for example, would be treated by syntactic rules, as a noun followed by a possessive pronoun.

Criterion (F) postulates that 'clitics can attach to material already containing clitics'.

Examples: [sámʕik] 'he heard you'

[samʕ ík ʃi] 'did he hear you?'

[lbá:riħ] 'yesterday'

[ma ʃuftú:ʃ mᵊlbá:riħ] 'I haven't seen him since yesterday'

The [m] in [mᵊlbá:riħ] is accounted for by the clitic [mn] having two allomorphs :[m] before the article /l/ or its variants (see below, under 'Article') and [mn] elsewhere.

Since the six above-mentioned criteria were postulated in order to distinguish between clitics and inflectional affixes, it follows that the preposition, conjunction, interrogative particle and pronoun, to which the criteria applied, are not inflectional affixes. However, can we say, at this stage, that they are clitics? It remains to demonstrate that they are not independent words.

B. Free or bound words?

The evidence for dependency is mainly phonological.

1. Evidence from stress

As was mentioned in Chapter I (under 'Stress'), clitic pronouns and affixes are treated by stress rules as part of the word. Consequently in certain cases, the stress of a particular word may shift its position.

Examples: [yóḍrab] 'he hits' [yaḍráb kum] 'he hits you(pl.)'

[tífhim] 'she understands' [tifhím hum] 'she understands them'

2. Evidence from the rules for vowel lengthening, and final vowel

deletion and metathesis

Vowel lengthening

Example: [yiʃrí: hum] 'he buys them' (yiʃri + hum)

Final vowel deletion

Examples: [ʾd:iχwá:ni fárks u] 'he was searched by the customs officer' (farkas + u)

[bágʾrtu má:tit] 'his cow died' (bagrit + u)

Metathesis

Examples: [xáʃm u] 'his nose' (xʃam + u)

[súbʕ i] 'my finger' (sbuʕ + i)

3. Evidence from immobility

There is no alternative order to such combinations as the following:

ʕtɑ: hu: l hum 'he gave it to them'

*ʕtɑ: hum l hu

sraq hum li 'he stole them from me'

*sraq li hum

4. Evidence from non-coordinability

The morphemes in question are not coordinable. Indeed, such constructions as the following are not permissible:

*[ʃúftu whá] (for [ʃúftu wʃúftha]) 'I saw him and her'

*[ʕtɑ:hú:li wlík] (for [ʕtɑ:hú:li wʾʕtɑ:hú:lik]) 'he gave it to me and you'

All of the above evidence shows that the morphemes in question are not independent words.

C. Subject affixes

Some of the criteria applying to clitics seem to be satisfied by subject affixes also. For example, 'there are no arbitary gaps in the set (of verb-subject affix) combinations' (Criterion B). Similarly, there are 'no cases where some particular (verb-subject affix) combination, shows an unexpected phonological form' (Criterion C). Such differences as the ones found in the following pair of examples are accounted for by general rules (see also Chapter III under 'Subject affixes'):

kitb it kta:b 'she wrote a book'

qra:t kta:b 'she read a book'

The difference in the structure of the third person feminine suffix /it/ is due to the latter's having two allomorphs : [-it] and [-t]. Finally, 'there are no semantic idiosyncracies' for a combination of a word and a subject affix (Criterion D). Such a combination would always refer to subject. The remaining three criteria postulated by Zwicky and Pullum, would show subject affixes to be inflectional affixes rather than clitics : subject affixes 'exhibit a (high) degree of selection with respects to their hosts...' (Criterion A). Indeed, they can only attach to verbs.

Examples: yiktib 'he writes'

tuxruʒ 'she goes out'

Similarly, a combination of a word and subject affix is treated as a 'unit' by syntactic operations (Criterion E).

Finally, 'clitics can attach to material already containing clitics' whereas subject affixes cannot (Criterion F). Indeed, the operation, combining a word with a subject affix, is always prior to the one adding other elements.

Example : yiʃri 'he buys'

yiʃri: h 'he buys it'

yiʃri: hu: li 'he buys it for me'

The criteria described above, then, do not show for certain that subject affixes are not clitics. There is, however, at least one more factor which is against subject affixes being clitics : there is no phonological relationship whatsoever between subject affixes and their 'full forms', as can be seen by comparing the list of subject affixes in Chapter III, Section I, with the full forms given below.

II. RANGE OF CLITICS IN THE DIALECT

Here, I shall adopt the classification of Zwicky (1976).

A. Simple clitics : 'cases where a free morpheme, when unaccented, may be phonologically reduced'. By this definition, most prepositions, some conjunctions and interrogative particles and the article could be 'simple clitics'.

(i) Prepositions

Examples: - bi 'of' [dó:r bzú:z byú:t] 'a two-roomed house'

- li 'to' [á:na má:ʃi ldó:ri] 'I am going home'

As will be shown later, under 'Special clitics', the preposition /li/ takes a different shape when it is combined with object pronouns.

-min 'from' [xráʒ mᵊlᵊblá:d] 'he left the country'

(ii) Conjunctions

Example: - wa 'and' [qa̤t:ú:s wkálb] 'a cat and a dog'

(iii) Interrogative pronoun

Example: - a:ʃ 'what' [ʃfám:a fᵊt:álvza] 'what's on television'

Notice that the 'clitic forms are derived from the full forms by processes' (Zwicky, 1976). In most cases, the vowel of the 'full form' is deleted. In the case of /min/, as was mentioned above, the clitic has two allomorphs: [mn] and [m].

(iv) The article :

-(i)l 'the'	ħil: lba:b [lbá:b]	'open the door'
	aʕṭi:ni lqlam [lˀqlám]	'give me the pen'

The /l/ of the article assimilates to the consonant immediately after it, if it is either an inter-dental or a dental and alveolar or a palatal (excluding the semi-vowel).

Examples:	[ˀɔ:í:b]	'the wolf'
	[ˀd:ó:r]	'the house'
	[ˀʒ:irá:n]	'the neighbours'

B. Special clitics : 'cases where an unaccented bound form, acts as a variant of a stressed free form, with the same cognitive meaning and with similar phonological make-up'.

Examples:

1. Personal pronouns

(a) Free forms:

a:na	'me'
inti	'you'(sing.)
hu:a	'him'
hi:a	'her'
aħna	'us'
untum = untu:ma	'you'(pl.)
hu:ma	'them'

/untum/ 'you'(pl.) is in free variation with /untu:ma/.

(b) Bound forms

(i) Direct object pronouns

ni	'me'	na	'us'
(i)k	'you'(sing.)	kum	'you'(pl.)
(u)(h)	'him'	hum	'them'
ha	'her'		

These pronouns are added after verbs.

The second person singular pronoun /(i)k/'you' behaves like the third person feminine subject suffix /it/. It is pronounced [ik] immediately after a consonant, and [k] immediately after a vowel. Similarly, the third person masculine direct object pronoun is pronounced [u] immediately after a consonant, and [h] immediately after a vowel. Furthermore, it is changed to /hu/ whenever it is followed by an indirect object pronoun. Finally, notice that the gender distinction is only made in the third person of the singular.

Examples:	smaʕ ni	'he heard me'
	samʕ ik	'he heard you'
	samʕ u	'he heard him'
	ʕṭa: ni	'he gave me'
	ʕṭa: k	'he gave you'
	ʕṭa: h	'he gave him'
	ktib hu: li	'he wrote it to me'
	ʕṭa: hu: li	'he gave it to me'

(ii) Indirect object pronouns

These are composed of the preposition /li/ and direct object pronouns. As was mentioned above, under 'Simple clitics', the preposition /li/ takes a different shape, that is /il/, when combined with object pronouns. Furthermore, /il/ has two allomorphs : [il] immediately after a consonant and [l] immediately after a vowel.

The first person singular direct object pronoun /ni/ is changed to

/i/ when combined with /(i)l/.

Indirect object pronouns

Singular	Plural	
(i)l i	(i)l na	1st person
(i)l ik	(i)l kum	2nd person
(i)l u	(i)l hum	3rd person
(i)l ha		

Examples:

ktibt il ha ʒwa:b	'you(sing.) wrote her a letter'
bu:h ʃra: l u karhba	'his father bought him a car'
um:u maʃtit l u ʃaʔru	'his mother combed his hair'

Notice that, in the last example, the /i/ of /il/ has been deleted in accordance with the rule for final vowel deletion and metathesis (Rule (1), Chapter I).

2. Genitive pronouns

These are attached to nouns, prepositions and other pronouns.

(a) Apart from the first person of the singular, genitive pronouns are similar to direct object pronouns. The same changes occur depending on the final radical of the 'host'.

Examples:

kta:b ik	'your(sing.) book'
kta:b u	'his book'
kursi: k	'your(sing.) chair'
kursi: h	'his chair'
waħd ik	'only you(sing.)'
waħd u	'only him'
wra: k	'behind you(sing.)'
wra: h	'behind him'

When followed by a genitive pronoun, plural nouns ending in /i:n/ and historical dual nouns ending in /i:n/, lose their final /n/.

Examples:	mudi:ri:n	'headmasters'	mudi:ri: k	'your headmasters'(sing.)
	ydi:n	'hands'	ydi: kum	'your(pl.) hands'

/muðun:i:n/ 'singers' behaves in a different way: it does not lose its final /n/.

Example: muðun:i:n kum 'your(pl.) singers'.

This is to avoid confusion with the singular counterpart /muðun:i/ 'singer'.

Example: muðun:i: kum 'your (pl.) singer'

The equivalent of English possessive pronouns mine, yours, etc. is formed by the suffixation of a genitive pronoun to the genitive particle /mta:ʕ/.

Example: lkta:b ha:ða mta:ʕu 'this is his book'

Similarly, the equivalent of English 'have' (denoting possession) is formed by the suffixation of a genitive pronoun to the preposition /ʕand/.

Example: ʕand ha zu:z dyq:r 'she has got two houses'

(b) First person singular genitive pronoun

(i) Nouns, prepositions and pronouns

The first person singular genitive pronoun is /i/ if the final radical of the 'host' is a consonant.

Examples:	ka:s i	'my glass'
	bi:d i	'myself'
	ʃku:n i	'who am I?'

When the 'host' to which /i/ is suffixed, is of a /CVC/ pattern, the

final consonant of /CVC/ is geminated:

Examples: min 'from'

min: i 'from me (because of me)'

(ii) Nouns

The first person singular genitive pronoun is /ya/ if the final radical of the 'host' is /u/ or /i/ (including plural nouns ending in /i:n/ or (A),(the latter only -in masculine singular nouns and plural nouns of the CCA pattern.) For the remaining nouns ending in (A), see the section on 'Dual' in Chapter IV and the section on 'Nouns ending in (A)' below.

Examples: tri:ku: ya 'my pullover'

swa:ri: ya 'my shirts'

mumaθ:li: ya 'my actors'

ʕʃa: ya 'my dinner'

nsa: ya 'my women'

It is /Ay:a/ in historical dual nouns ending in /i:n/.

Examples: sa:q i:n 'legs'

sa:q ay:a 'my legs'

ʕi:n i:n 'eyes'

ʕi:n ay:a 'my eyes'

wa:ld i:n 'parents'

wa:ld ay:a 'my parents'

The phenomenon of CCVC plural nouns geminating their final consonant before a vowel-initial suffix, which was noticed by H.Wise (1979) in the dialect of Kerkenna, is absent from the dialect of Tunis. What happens instead is either of the following:

- metathesis, which occurs whenever the stem contains three full ungeminated consonants :

Examples :

Examples:	ktub	'books'	kutb i	'my books'
	flis	'buttons'	fils ik	'your(sing.)buttons'
	sˤnˤab	'statues'	sˤanˤb u	'his statues'

- <u>addition of the genitive particle</u>/mta:ʕ/, which occurs in all other cases.

Examples:	kwiʃ	'bakeries'	kwiʃ mta:ʕi	'my bakeries'
	kwur	'balls'	kwur mta:ʕu	'his balls'
	qbub	'domes'	qbub mta:ʕik	'your(sing.) domes'
	kbub	'balls of wool'	kbub mta:ʕi	'my balls of wool'

Notice that the four above examples may be followed by a consonant init:

suffix:	kwiʃ na	'our bakeries'
	kwur kum	'your(pl.) balls'
	qbub hum	'their domes'
	kbub ha	'her balls of wool'

(iii) <u>Other</u>

The first person singular genitive pronoun is /ya/ if the final radical of the 'host' is a vowel.

Examples:	fi	'in, to'
	fi: <u>ya</u>	'in me, to me'
	mʕa	'with'
	mʕa: <u>ya</u>	'with me'
	baħˀa	'near'
	baħˀa: <u>ya</u>	'near me'

There are at least two prepositions which behave in a different way: /ʕla/ 'for' does not yield */ʕla: <u>ya</u>/ but /ʕli: <u>ya</u>/ 'for me' as in /yinʃid ʕli: <u>ya</u>/ 'he is asking for me'. This, moreover, is typical of the whole paradigm.

Example: ʕli: <u>k</u> 'for you' ʕli: <u>hum</u> 'for them', etc.

Similarly /li/ 'to, for' does not yield */li:ya/, although the latter

is possible in some idiolects, but /lay:a/ 'to me, for me'. This is restricted to the first person of the singular:

Singular	Plural	
lay:a	li:na	1st person
li:k	li:kum	2nd person
li:h	li:hum	3rd person
li:ha		

The relationship between 'special clitics' and their 'full forms' is not so straightforward as the one between 'simple clitics' and their 'full forms'. 'Most investigators of special clitics, seem to have assumed that there is no rule-governed phonological relationship and that the distribution of forms is essentially a lexical matter' (Zwicky, 1976).

C. 'Bound words', 'cases where a morpheme that is bound and unaccented, shows considerable syntactic freedom, in the sense that it can be associated with words of a variety of morphosyntactic categories'. The interrogative particle /ʃi/ and the negative particle /ma...ʃ/ fit the above definition, in the sense that they do not have 'free or accented' counterparts, and that they 'can be associated with words of a variety of morphosyntactic categories'.

Examples:

Verb	[ʃúftʃi lfí:lim há:ða]	'have you seen this film?'
Adjective	[bní:nʃi lᵊftu:r]	'is it a tasty lunch'
Participle	[ma:ʃí:ʃi ldó:rik]	'are you(sing.) going home'
Verb	[ínti ma qrí:tʃ lᵊktá:b]	'you(sing.) haven't read the book'
Prepostions and Genitive Pronouns	[ma fuqú:ʃ flú:s]	'he doesn't have any money(on him)'

In all of the above description of clitics, there were examples of 'proclitics' (preceding the word to which they are attached) and of

'enclitics' (following the word to which they are attached).

III. NOUNS ENDING IN (A)

In Chapter IV, in the section on the 'Dual', it was mentioned that singular feminine nouns ending in (A) delete that (A) and replace it by the feminine suffix /it/, when they are followed by a dual suffix. When the suffix is a clitic or when the noun is followed by some other category (noun or other) with which its relationship is 'possessive', the above rule needs to be amended: Rule (1) : Singular feminine nouns and plural nouns ending in (A), except from the CCA pattern, delete that (A) and replace it by /it/.

Examples:	bagra	'cow'			
	bagrit ha	'her cow'	bagrit wa:ħid	'somebody's cow'	
	ustla	'buckets'			
	ustlit na	'our buckets'	ustlit sami:ra	'Samira's buckets'	
	suri:a	'shirt'			
	suri:it ha	'her shirt'	suri:t ik	'your(sing.) shirt'	

In the last example, the first element of / it/ has been deleted in accordance with the rule for final vowel deletion and metathesis (Rule (1), Chapter I).

suri:it wlid 'a boy's shirt'

As was mentioned in Chapter IV, Section III, nouns belonging to the pattern /...V:CCA/ where the final consonant is a semi-vowel, behave in a different manner from their counterpart with a 'full' final consonant : /y/ is pronounced only when it is followed by a vowel. When followed by a consonant, /y/ is deleted.

Examples: sfin:a:rya 'carrots'

sfin:a:ryit kum 'your carrots' (pl).

*sfin:a:ryt i

The vowel of /it/ has been deleted in accordance with Rule (1), Chapter I.

sfin:a:rt i 'my carrots'

mubi:lya 'furniture' mubi:lyit ha 'her furniture'

*mubi:lyt ik mubi:lt ik 'your(sing.) furniture'

IV. MORPHOLOGY OF ENCLITICS

Generally, the suffixation of a particular 'clitic' to a particular 'host' follows regular phonological rules:

1. Final vowel deletion

Examples: *tisriq u tisrq u 'she robs him'

*yiktib il i yiktib l i 'he writes to me'

*yifrɑħ il ha yifrħ il ha 'he is happy for her'

ku:rɑ 'ball'* ku:rit ik ku:rt ik 'your(sing.) ball'

2. Vowel lengthening

Examples: ʕto: ni 'he gave me'

ʃra: hu: li 'he bought it for me'

kɑrni: k 'your(sing.) notebook'

ba:hi: ʃi 'is it nice?'

3. Metathesis

Examples: fhim 'he understood'

fihm ik 'he understood you(sing.)'

ktub 'books'

kutb i 'my books'

Some 'host-clitic' combinations, however, show special morphology:

Rule (2): The third person feminine suffix /it/, for example, geminates its /t/ before a vowel-initial suffix.

Examples:	ʃarbit	'she drank'	ʃarbit: u	'she drank it'
	kal:mit	'she spoke to'	kal:mit: ik	'she spoke to you(sing.)'
	kitbit	'she wrote'	kitbit: il na	'she wrote to us'

Notice that the /t/ in */kitbit il ik/ 'she wrote to you(sing.)' does not geminate, because the vowel following it is deleted in accordance with the rule for final vowel deletion and metathesis (Rule (1), Chapter I) : /kitbit l ik/.

Rule (3) : Secondly, the final non-affixal consonant, when it is the final radical, of a stem containing one short vowel, geminates before /il/.

Example :	ktib	'he wrote'	ktib: il na	'he wrote to us'

Notice that the final consonant of */ktib il i/ does not geminate, because the vowel following it is deleted in accordance with Rule (1), Chapter I : /ktib l i/ 'he wrote to me'.

Rule (4) : Thirdly, when immediately following a vowel, the subject suffix /u/ is changed to /w/ before a suffix.

Examples:	yaqra: u	'they read'
	yaqra: wha	'they read it(fem.)'
	bda: u	'they began'
	bda: wh	'they began it (masc.)'
	niʃri: u	'we buy'
ma	niʃri: wʃ	'we don't buy'
ma	niʃri: whʃ	'we don't buy it'

naʕti: u 'we give'

naʕti: whu:lu 'we give it to him'

(Note that the object pronouns treat /w/ as a vowel : 'they began it (masc.)', for example, is not */bda:w u/ but /bda:wh/).

Fourthly, notice that the rules always apply from right to left.

Examples: waʃwaʃ 'he whispered'

*waʃwaʃ il i waʃwaʃ l i 'he whispered to me'

*waʃwaʃ il ha waʃwʃ il ha 'he whispered to her'

Finally, as was mentioned by David Cohen (1975), /qu:l/ 'say' behaves in a different way from other verbs, when the indirect object pronoun /il-/ is attached to it. The /t/ of the third person feminine suffix /it/, does not geminate before a vowel and the /i/ of the /it/ suffix deletes in accordance with the rule for final vowel deletion and metathesis (Rule (1), Chapter I) :

*qa:lit: il na

*qa:lit il na

qa:l t il na 'she said to us'

Furthermore, in the imperfect and imperative, the long vowel of the stem is shortened and the vowel of /il/ (ie. /i/) is deleted.

Examples: *n qu:l il ik

*n qul il ik

nqul: ik 'I say to you(sing.)'

*qu:l il ha

*qul il ha

qul: ha 'say to her'

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